RAILWAY AGE

APRIL 1, 1950

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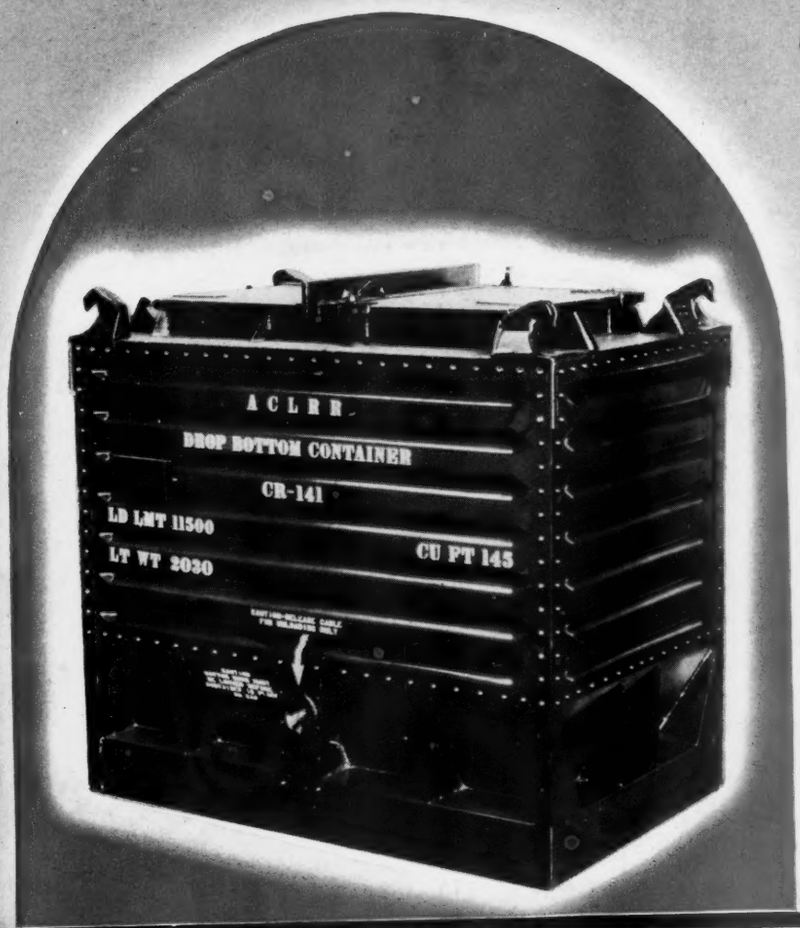

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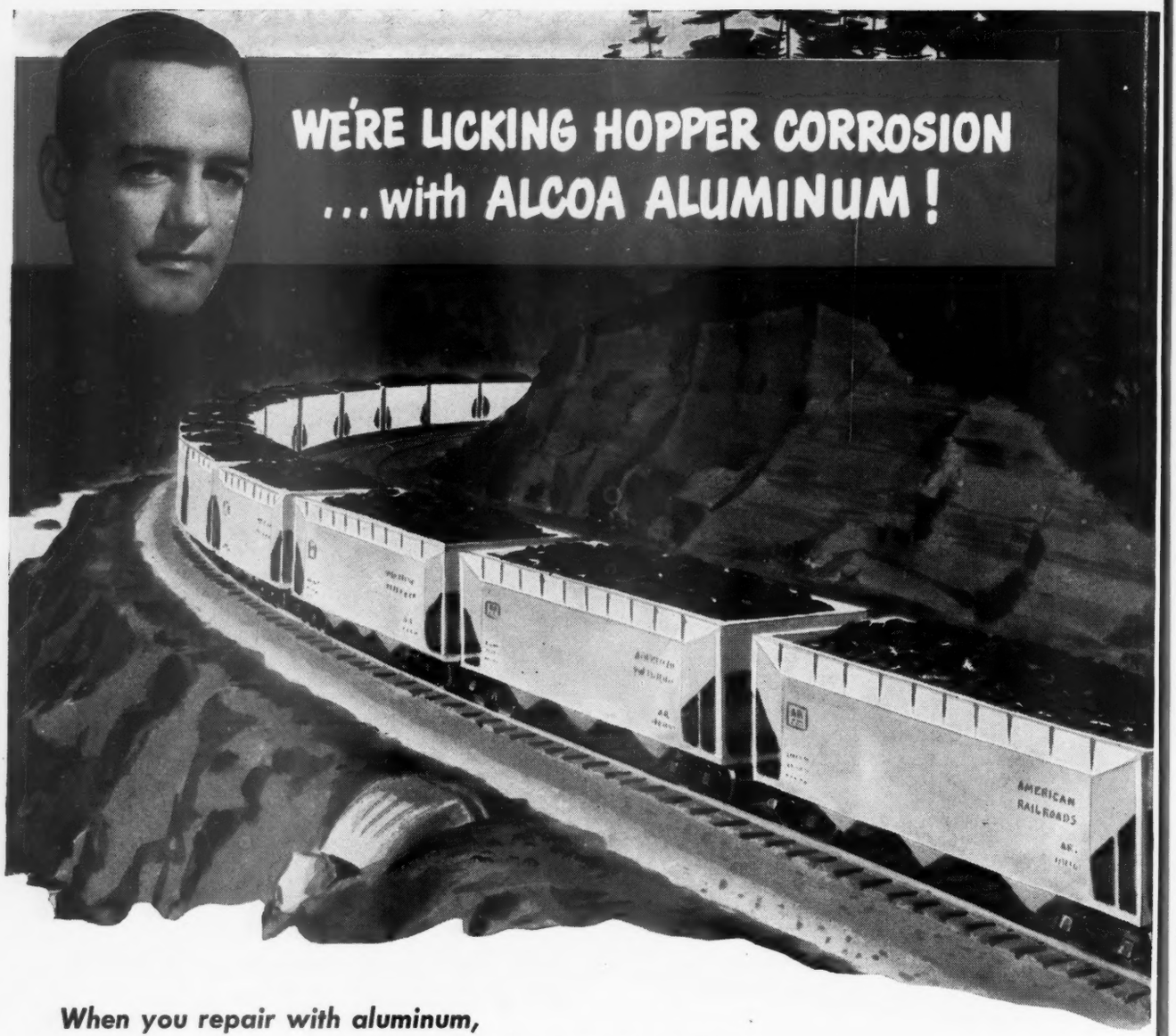

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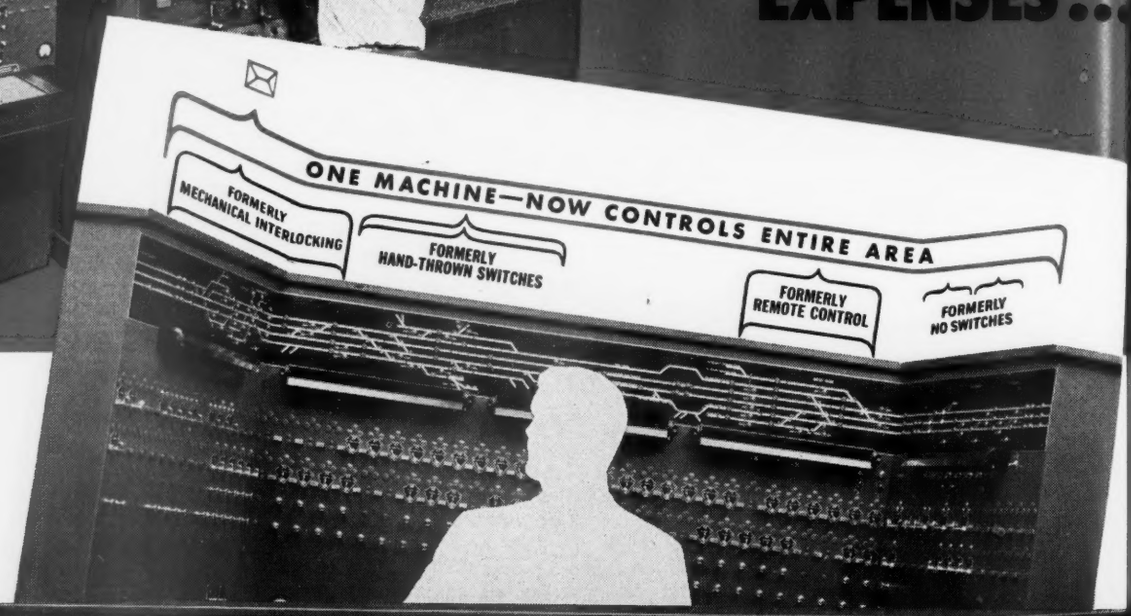
These Interlockings were Consolidated

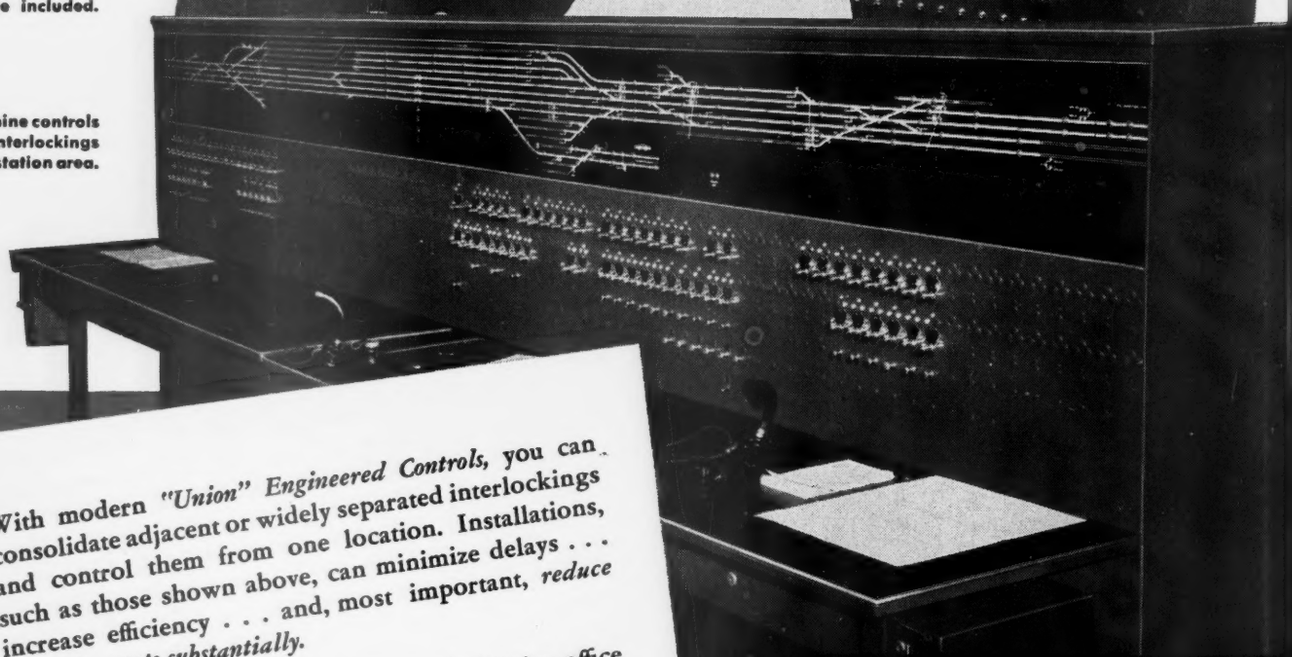
TO REDUCE OPERATING EXPENSES...

Below: Control of 6 interlockings concentrated in a single tower.



Right: Single machine controls 5 separate areas each with its home signal limits. Two former interlockings and extensive new interlocking facilities are included.

One machine controls 3 large interlockings in a busy station area.



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WEEK AT A GLANCE

FOUR YEARS' MINIMUM: Four years is a minimum—not a maximum—period for job protection conditions in railroad consolidation cases, the Supreme Court has ruled, reversing the I.C.C. See the News columns for details.

IN THE WEEK'S NEWS: Indianapolis Union celebrates 100th anniversary.—Pressed Steel completing two new types of freight cars.—Car loadings again exceed '49 and '48.—Gass predicts heavy lake coal and ore traffic.—I.C.C. finds "failure to operate in accord with signal indications" cause of Long Island wreck.—U.S. Steel may build railroad in Venezuela.

EQUIPMENT SUMMARY: Early predictions of heavy 1950 railroad equipment buying were certainly fulfilled in the year's first quarter, when *Railway Age* reported orders for 591 Diesel-electric locomotive units, 21,583 freight-train cars and six rail Diesel passenger cars, costing altogether nearly $200 million. The quarter's totals, and a detailed breakdown of orders reported in March, appear in the Equipment and Supply News columns. And, just to get the year's second quarter off to a flying start, those same columns report additional orders for 68 Diesel-electric units from the Erie, 1,500 freight cars from the L.V., and 500 from the L.&N. Technically, perhaps, those might be considered first-quarter orders, but however they may be dated they add up to better service for the public, operating economies for the railroads, and good business for the builders. The T.&P. is in the market, too, for 23 Diesel units, and the Canadian National plans to buy Diesels and passenger-train cars. Incidentally, Arthur H. Gass, in his monthly survey (also summarized in the News) says January Diesel orders set a new high monthly record. And an editorial on page 41 points out that freight-car business may become still better when improved types of cars now in development become available and if Equitable Life's new financing plan proves attractive.

"UNION SHOP" ON RAILROADS? As reported in the News section, a number of Senators have introduced a bill to legalize on railroads the so-called "union shop" and the "check-off" system for union dues. A companion bill has also been introduced in the House of Representatives, as recently reported in this paper. Our leading editorial—in exploring the reasons behind introduction of these bills—points out that a union shop on the railroads would certainly mean much less individual freedom than the rank and file of railroad employees now enjoy. And it concludes, too, that railway unions might do better to continue the type of independent thought and action which made them prominent and powerful, than to ape the actions of others.

FULL POWER AT ALL SPEEDS: A basic factor in the rapid success of Diesel-electric locomotives is the use of the electric transmission to deliver power from the locomotive prime mover to the driving axles. That has, in effect, made possible, either actually or potentially, complete railroad electrification, with locomotives deriving power either from outside sources or from self-contained high efficiency prime movers. Some of the reasons for use of electric transmissions, and some of the results of their use, are outlined by Charles Kerr, Jr., of the Westinghouse Electric Corporation, in the article which begins on page 51.

BETTER COMMUNICATIONS SAVE TIME AND MONEY: Expedited train operation, better service to shippers, increased message capacity, and substantial monetary savings are among the positive benefits which the Western Pacific has obtained from improvement of its communications facilities. As related in the illustrated article which starts on page 58, the improvements consist principally of printing telegraph and long-distance telephone equipment carrier-operated on existing line wires.

ROBOT FIREMAN: To provide complete fire protection at a major, but isolated, fuel-oil storage facility, the Pennsylvania has recently installed an all-automatic air-foam extinguishing system, said to be the only one in the railroad industry which goes into action without manual control. The new unit, furnished by the Pyrene Manufacturing Company, is described and illustrated on page 48.

"BLUE BIRD": One of the country's newest streamliners, complete with dome cars, is the Wabash Chicago-St. Louis "Blue Bird." The train's new Budd-built equipment, installation of which has been previously reported in *Railway Age*, is described, with numerous illustrations, on page 42.

DIESEL CLUB: At Danville, Ill., the almost wholly Dieselized C.&E.I. has its own Diesel club—an organization of some 130 road, shop and supervisory employees concerned with various phases of Diesel operation. See page 56.

NOTHING DOWN: A new method of freight-car financing, which is designed to enable railroads to secure immediately, without any down payment, as much new freight equipment as they need, has been announced by the Equitable Life Assurance Society. Under the plan, details of which are given in the News pages, the insurance company would purchase new cars from the manufacturers, and lease them to domestic railroads. That the plan has some very definite possibilities is indicated not only by Equitable's own standing, but by the fact that Pullman-Standard Car Manufacturing Company is said to have "subscribed in principle" to it, and to be seriously considering participation in the financing, while Pressed Steel Car is reported to have called the plan "a move in the right direction." At least one major railroad, moreover, is reported to be seriously interested in acquiring cars under the plan.

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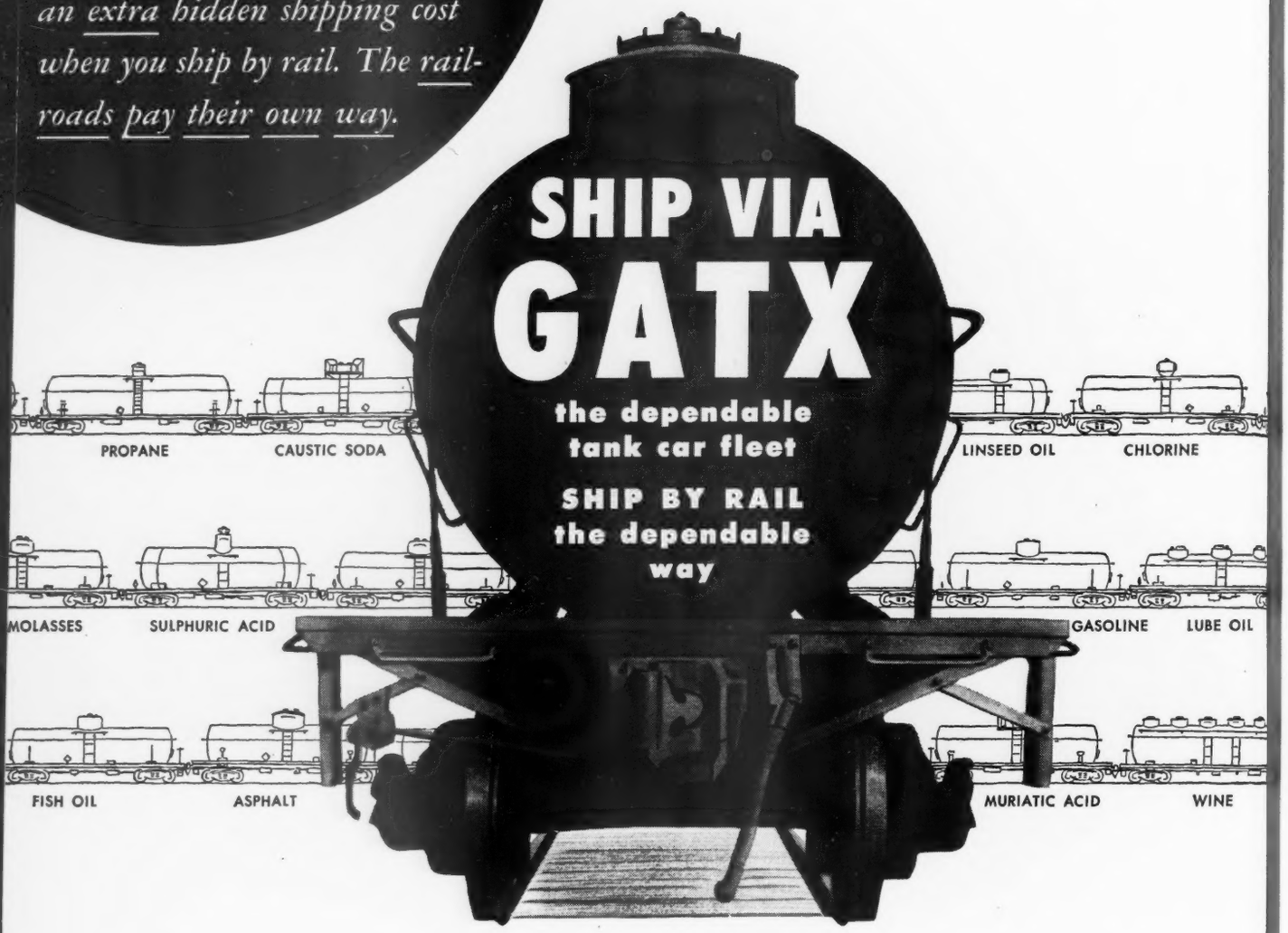

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RAILWAY UNIONS PREPARE TO SEEK "UNION SHOP" AND CHECK-OFF

The railway labor unions last week repudiated their historic and widely famed abstention from advocacy of the closed shop and the check-off; and are now seeking an amendment to the Railway Labor Act to legitimize both the so-called "union shop" and a provision whereby the employing railroad may deduct union dues from the employees' wages. A bill to this effect, H.R.7789, has been introduced in the Lower House of the Congress by Representative Crosser of Ohio, always in such matters the obedient servant of the railway union chieftains.

The clause in the present Railway Labor Act which outlaws the "closed" or "union" shop on the railroads was put there, not at the instance of the railroads, but by the unions themselves. Why should the leaders of these unions at this late date wish to repudiate a policy which brought them to power and prosperity—and general acceptance by the railroads and the public—long before labor organizations in other industries attained such status? Why did these unions oppose the closed shop initially—thereby winning for themselves a reputation for conservatism and self-reliance, which they now renounce? The answers to these questions are of importance, and hence should be of interest, to all Americans—and to none more so than railway employees themselves, whose economic and political freedom are jeopardized by the union leaders' reversal of their historic opposition to the closed shop.

The railway unions' opposition to the closed shop was originally motivated by active competition among these unions, which number some two dozen. Most of these unions "cover" occupations which are also "covered" or coveted by one or more of the rest of the railway unions. The adoption of the closed or union shop would tend to "freeze" the *status quo* on any railroad where such an agreement was effected. This "freezing" would thereafter thwart the ambitions, which the leaders of many of the unions have heretofore cherished, of unseating some partially rival organization as the recognized bargaining agent. The desire of the organizations to compete with each other for members has doubtless been the strongest motive for retaining the open shop on the railroads, thus far.

Means Less Individual Freedom

This competition for membership by the railway unions has been no unmixed blessing for the railroads—because one of the principal weapons of the inter-union competition has been "getting tough" with the railroads; and especially in pressing so-called "featherbed" claims. Whatever evil effects this competition has had on the railroads, though, its effect on railway employees has been to give them greater freedom than employees in other large industry have, to move from one union to another or

to abstain from union membership entirely. And it is unquestionably with the object of putting an end to this freedom of their members that the union chiefs have decided to give up the less profitable privilege of vigorous competition with each other.

If the union chiefs could succeed in this objective, their next goal would probably be, as it has been in other industries, the establishment and union control of pension and "welfare" funds—giving union management the privilege of taking away the means of livelihood and the "social security" of recalcitrant employees who might not vote, contribute, sign, cheer or jeer as directed by headquarters. This has happened to employees in other industries. It could happen on the railroads. Such a measure as H.R.7789 could scarcely have any other purpose.

It is not the belief of this paper that the leaders of railway labor, as a class, are a special brand of devils. On the contrary, they are human beings who find themselves in positions of large and strategic political power, for reasons not well understood by most people, possibly not fully even by the union leaders themselves. Under such circumstances what usually happens is that notice is taken of the course of action which others have followed, with apparent success, and imitation of this action becomes a standardized fashion.

Union leaders in such industries as automobile or steel win expensive concessions from their employers, who pass the cost along to customers who have no alternative products to turn to. John Lewis and, so far to a lesser degree, the railway union leaders attempt to follow the identical course—and the customers forsake coal for other fuels; and transfer their freight from the railway to the highway. Most other unions have some form of the "union shop" and so the railroad unions must have it too, whether it will do them any actual good or not.

"Me Too" Policy

The railway labor unions outdistanced all the other unions when they did their own thinking and patterned a program for themselves which was peculiarly adapted to conditions on the railroads. It remains to be seen whether they will do as well by shaping their strategy in imitation of the Johnny-come-latelies who head the unions in automobiles and steel; or of John Lewis, who achieved nothing formidable in the way of organization until the politicians came to his rescue. The politicians—not voluntary action of working men—gave such union chiefs as Lewis, Murray and Reuther their present power. It was different with the railway labor leaders —the politicians didn't make them; instead they made the politicians. It is a strange business to see the old masters voluntarily relinquishing their preeminence to follow along in the wake of labor leaders who had never got to first base until the politicians came to their assistance.

BETTER SHIPPING

April 1 is the New Year's day of loss and damage prevention. Carloading, including blocking and bracing, is sure to come in for its share of discussion, as it should.

But the traffic managers and general managers do not load the cars. Carloading, if it is to be improved, must be attacked where the work is done.

One manufacturer—General Foods—has realized that it could not get the best results in carloading from men who were something less than the best available for the job. So, when the company set up its transit warehouse distribution plan, about two years ago, it started looking for *good* men to do its carloading at the warehouses. For example, recently, after interviewing some 800 men who desired loading jobs at its Jersey City, N. J., warehouse, some 50 workers were hired. These men, as at all the warehouses, are paid wages somewhat above the usual scale for this type of work. They also get pension plans, vacation allowances, sick benefits and all the things that labor is seeking these days.

General Foods' car loaders are trained in their work and are taught to be proud of it. Crews have been encouraged to send a signed card with each car.

This card asks the consignee to indicate what he thought of the way the car was loaded and in what shape the lading got to its destination. A system of credits for perfect "outturns"—as reported by customers—has been developed, and gang scores are posted at the warehouse time clock each week. A competitive spirit has developed between the crews, and there is much interest in the outturn reports received from the consignees.

Results? In the area served by the transit warehouses, during 1949, damage claims on more than 3,800 mixed carloads, each loaded to capacity, amounted to only $15,000. This compares with 1948 claims in excess of $100,000 which accrued on the same volume of traffic in the same area.

But the improvement shown at the transit warehouses solved only a part of G.F.'s carloading problem, for there still remained to be improved the loading at producing plants. Since about 60 per cent of the products of its many plants are shipped direct to the transit warehouses, this shipper has had an excellent opportunity to see what was wrong with plant carloading. Quite frequently the condition of the cars on arrival at the transit warehouses was far from satisfactory. So, as the warehouse loading crews gained in experience, carloading foremen from the plants were brought to the distribution warehouses to observe the outturn of some of the cars they had loaded.

Instruction in the new loading methods followed, and since that time a decided improvement is observed in the condition of cars loaded by the plants, with a diminution of claims on such movements.

Neither General Foods nor this paper thinks that

good carloading alone is going to solve all of the damage problem. But it can work wonders in that direction.

NEW FACTORS IN FREIGHT-CAR OUTLOOK

Several recent announcements affecting the railroads' acquisition of freight cars all promise a revision of the current attitude of the railroads toward the freight-car market. This outlook is dominated by reluctance of railroads to make commitments against credit for purchase of new freight cars when immediate pressure for more cars is not compelling.

Two car builders have let it be known that they are developing new types of freight cars which they expect will be ready for use soon. As noted on page 84 of the March 18 issue, several interests have joined with the General American Transportation Corporation to produce a box car possessing a number of features attractive to shippers and railroads alike which will cost substantially more than conventional box cars. In the annual report of the Pressed Steel Car Company, reviewed on another page in this issue, the president, John I. Snyder, Jr., announces that the company is well on the way to completing and testing two wholly new types of freight cars which are also expected to possess attractive advantages over conventional cars. Two other announcements of the Equitable Life Assurance Society and of Pullman, Inc., propose purchase-lease plans under which freight cars may be acquired on a straight rental basis without a down payment or amortization of the cost leading to ultimate ownership. The new cars being developed by General American and associates are also to be distributed to the railroads on a rental basis.

The prospect of freight cars of new types possessing important advantages from the standpoint of service and operation, and the railroads' prospect of being able to acquire new cars by renting rather than purchasing, are potential factors in a distinct change in the freight-car market. When car demand is light and builders have nothing new to offer, the competition between the railroads' own car shops and the builders is particularly sharp. With new products to offer, the position of the car builders will improve with respect to whatever business is moving, and at the same time the urge to retire old equipment, and replace it with new which will improve the quality and cost of freight service, is materially increased. The ability to acquire new cars for use on a rental basis, thus conserving credit, of which there is never too much, will also arouse the interest of roads in the market, provided the rental terms can be made attractive.

NEW YORK'S PROJECT TO AID CROSS-STATE TRUCKING

New York's Governor Thomas E. Dewey is proposing a colossal cross-state "thruway" to cost about a half-billion dollars, which will certainly make infinitely greater the competitive difficulties already suffered by the state's railroads. The proposed highway would run from the northern limit of New York City, through Westchester county; across the Hudson river on a new bridge somewhere south of Bear mountain; up the west side of the river to a point just south of Albany; and thence west across the state, past Syracuse, Rochester and Buffalo, to the Pennsylvania line near Ripley. It would be laid out for six lanes, although only four would be built immediately on most of the route. There would be no traffic lights or crossings. Construction would take about three years.

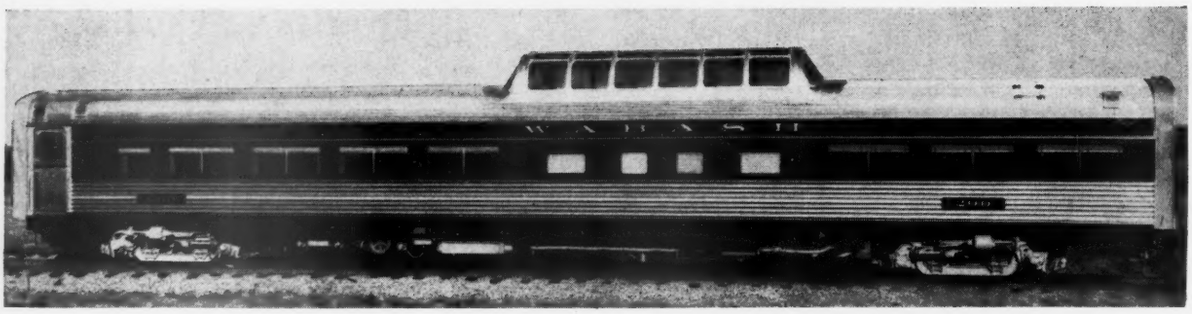
Through Westchester county, the highway would be free; north of that region, its use would be subject to special annual fees tentatively set at $5 or less for passenger cars, and a maximum of $80 per year for trucks.

"A saving of $100," Governor Dewey has been quoted as saying, "can be made in shipping a truckload of metal products from New York City to Buffalo."

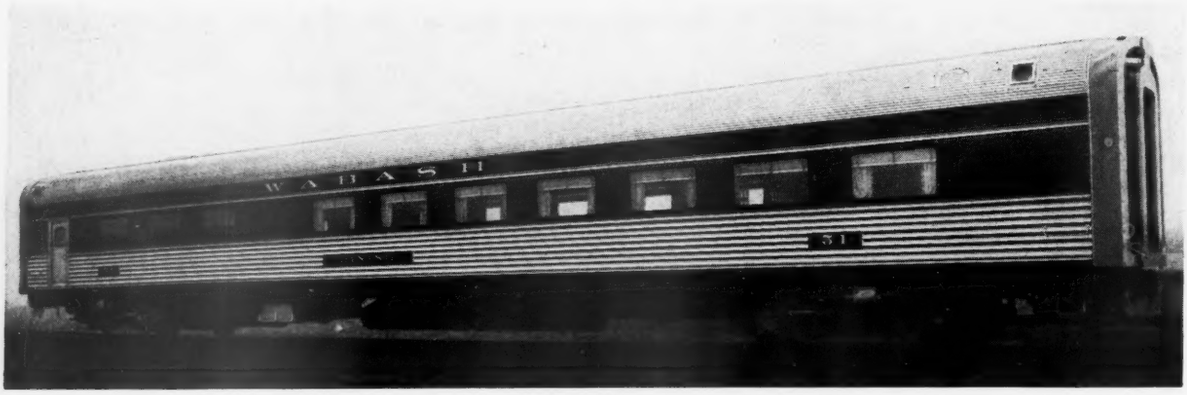
This means that a truck making 100 round-trips a year between those points could anticipate a potential saving of $20,000 a year for an expenditure of $80—four-tenths of one per cent—while the public, as usual, would hold the bag for the balance of construction, interest, maintenance and operating costs on the highway; and, presumably, would in most cases continue to pay prices based on railroad rates for the "metal products" and other commodities which the trucks haul.

With a larger and larger percentage of total invested capital going into tax-free transportation plant in public ownership, the base of private property on which taxes are assessed shrinks while the tax load to be borne constantly increases. New York State is already taxing its citizens to death, e.g., by levying income taxes on "income" which the victim never even sees, but which is deducted from his wages by his employer and passed along to the federal government.

What miracles of efficiency must the tax-*paying* railroads now contrive to offset the further advantages it is proposed to give to their competitors in the way of tax-*exempt* transportation plant? What do New York's taxpayers think of the prospect of further burdens coming their way as the traffic and revenues of tax-*paying* transportation facilities are thus further cannibalized by the tax-*exempt* and tax-*consuming* facility for commercial transportation which their political leaders are seeking to impose upon them?



Above—The chair cars each seat 54 passengers on the main floor and 24 in the dome. Below—The dining car



Budd Builds Six-Car "Blue Bird" for Wabash

Three dome chair cars, a dome parlor-observation car, diner-lounge, and baggage-buffet-lounge offer variety of accommodations for daylight service between Chicago and St. Louis, Mo.

On February 26 the Wabash placed in service a new Budd-built six-car all stainless-steel passenger train, four of the cars in which have dome observation compartments. The train operates between Chicago and St. Louis, Mo., making a round trip every day. It consists of a combination baggage-buffet-lounge car, three dome chair cars, a diner-lounge car, and a dome parlor-observation car.

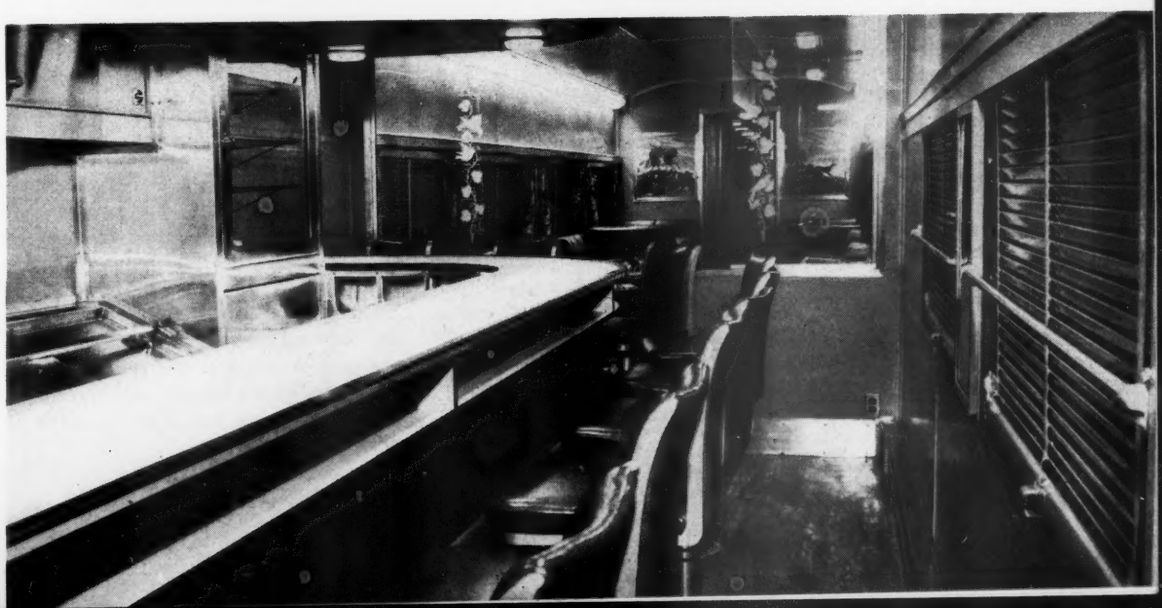
Each chair car seats 54 passengers on the main floor and has seats for 24 in the dome. The parlor-observation car seats nine in the forward parlor section, 14 in the rear parlor section, five in the under-dome drawing room, and six in the observation section at the rear end of the car. The dome seats 24. The dining car has five tables on each side of the dining room and seats 40. The cocktail lounge adjoining the dining room has seats for 12. The lunch counter accommodates nine and the adjoining lounge, 23. The chair cars, parlor sections, and drawing room can accommodate 190 passengers, exclusive of the 96 dome seats and the six seats in the observation section.

The exterior of the train is dark blue and stainless steel. The blue is applied on the skirt below the side sill, on the window panel, and on the letterboard. The latter two surfaces are separated by the unpainted stainless steel of the upper belt rail. The roof and sides of the car below the windows are unpainted stainless steel. Lettering is in gold on the dark blue ground.

Seats in the main-floor compartments of the dome chair cars are the Sleepy Hollow type and are individually reclining and rotating reversible. The rubber-covered foot rests are adjustable. Seats in the domes are reversible but do not recline. Ash trays are mounted in the arms of these seats and there are

Murals are done in oil on canvas

Looking down the dome stairway into the rear chair-car compartment



The buffet, looking toward the lounge at the rear end of the baggage-buffet-lounge

folding foot rests. The cushions and arm rests of all seats are foam rubber.

The decorations of the interiors of the chair cars and diner are all based on dark blue and gray walls, with drapes, upholstery and carpets varying to produce a distinctive color combination in each car. In one of the chair cars a rose carpet and blue needlepoint upholstery are set off by drapes with a blue background and contrasting horizontal stripes. The carpets in the other two cars are blue; the upholstery in one, gray, and in the other, ashes of roses. Drapes are patterned in blue, and gray and blue, respectively. Carpets in the domes are the same as in the main passenger compartments. Upholstery in the domes is of the same three colors used in the main passenger compartments of the three cars, but is selected so that the colors in the dome and main compartments of each car are different.

Decorations

In the dining car the walls of the cocktail lounge are blue and the ceiling light ivory. The carpet is a feather pattern in several tones of blue. The drapes are blue and the leather upholstery on the chairs and settees, Chinese red. In the dining room the wainscot and painted parts of the partitions are blue, and the sides above the windows and the ceiling, two tones of ivory. The patterned drapes and carpets are blue and the upholstery, tan leather. Table tops are black.

A distinctive feature of the dining car is the decorative screens which separate the dining room from the cocktail lounge. These are vertical rods of clear Lucite across which are laced strips of red leather matching the color of the lounge upholstery. The rods are edge-lit and the decorative bands etched around them glow red when the edge lights are on.

The pier panels in the dining room are faced with mirrors. These and the large mirror on the pantry foyer wall are gold tinted. Repoussè decorations are placed on the headers at the ends of the dining room.

The predominant hue in the parlor-observation car is plum which is used on the walls of the two main compartments. The carpet is rose and upholstery alternately ashes of roses and blue. The ceiling is a light beige, as are also the walls of the observation section. Wall colors in the domes are plum tones. with a rose carpet and seat upholstery alternately blue and gray.

Chairs in the rear parlor section are Sleepy Hollow type, rotating and fully adjustable. In the forward parlor section are nine movable barrel-back lounge chairs. The observation section is furnished with six large overstuffed lounge chairs. These chairs are all upholstered in ashes of roses.

The lounge in the combination car is furnished with 12 arm chairs, two sections with fixed settees and a curved corner seat. This room is decorated in tones of tan and blue-green. The sides are tan; the ceiling, light beige, and the painted portion of the end walls, blue-green. The carpet is rose and the leather in the sections and corner seat, green. The chair upholstery is equally divided among gray, blue and turquoise. Window drapes are turquoise. The pier panels in the lounge and counter sections are covered with gold-tinted mirrors.

The walls and ceilings in the lunch-counter section are finished in the same colors as those in the lounge. The door to the baggage space is blue-green, as is also the painted portion of the partition between the two rooms. The decorative feature of this partition is etched glass panels. The stools at the counter are upholstered in green leather, matching in color that in the lounge sections. The bar front is finished in green and tan leather and stainless steel.

Murals painted in oils on canvas, by Auriel Bessemer, decorate a partition in each of the cars, with the exception of the dining car. In the three dome chair-cars and the parlor-observation car the mural covers the partition above the wainscot at the end of the forward main passenger compartment. In the combination car there are two framed murals, one on each side of the passage at the end of the lounge opposite the lunch counter. These depict aspects of the

Facing page—Looking toward the cocktail lounge at the end of the dining room. Above left—Screens between the dining room and the cocktail lounge are clear Lucite rods laced with red leather. Above right—In the kitchen looking toward the pantry

life of the territory through which the train operates, some historical and some contemporary.

The car-body structures are of Budd Shotweld construction in which stainless steel is used throughout, except for the welded alloy-steel combination ends, draft sills and bolsters which are joined to the stainless steel center sills by rivets. Sides are of truss form and the corrugated roofs of the builder's standard type with outside purlines. The under floor consists of stainless steel pans, at one end of each of which is formed a transverse floor support. The plywoodfloor is laid directly on these floor supports and secured to them with Cherry monel rivets.

Sound deadening is applied in the form of Insulmat, which is sprayed on the inside of the roof, sides, ends and floor pans. The body insulation is 3 in. thick throughout. In the four dome cars the material is Ultralite. In the combination car and dining car the material is Stonefelt. The kitchen and pantry partitions in the dining car, and the partition between the baggage section and the lunch counter in the combination car are insulated with 1½ in. of Stonefelt. These and partitions in the other cars are of carbon steel, aluminum or metal-faced plywood.

Electric Power—Air Conditioning

Windows are Adams & Westlake double-glazed breather type. Those in the body of the car are glazed with ¼-in. panes of Solex outside and safety glass inside. The dome windows are curved and both inside and outside panes are ⅜ in. thick. The outside pane and the outside lamination of the inside safety glass are Solex. The windows at the observation end of the parlor-observation car are also curved to conform to the lines of the car body.

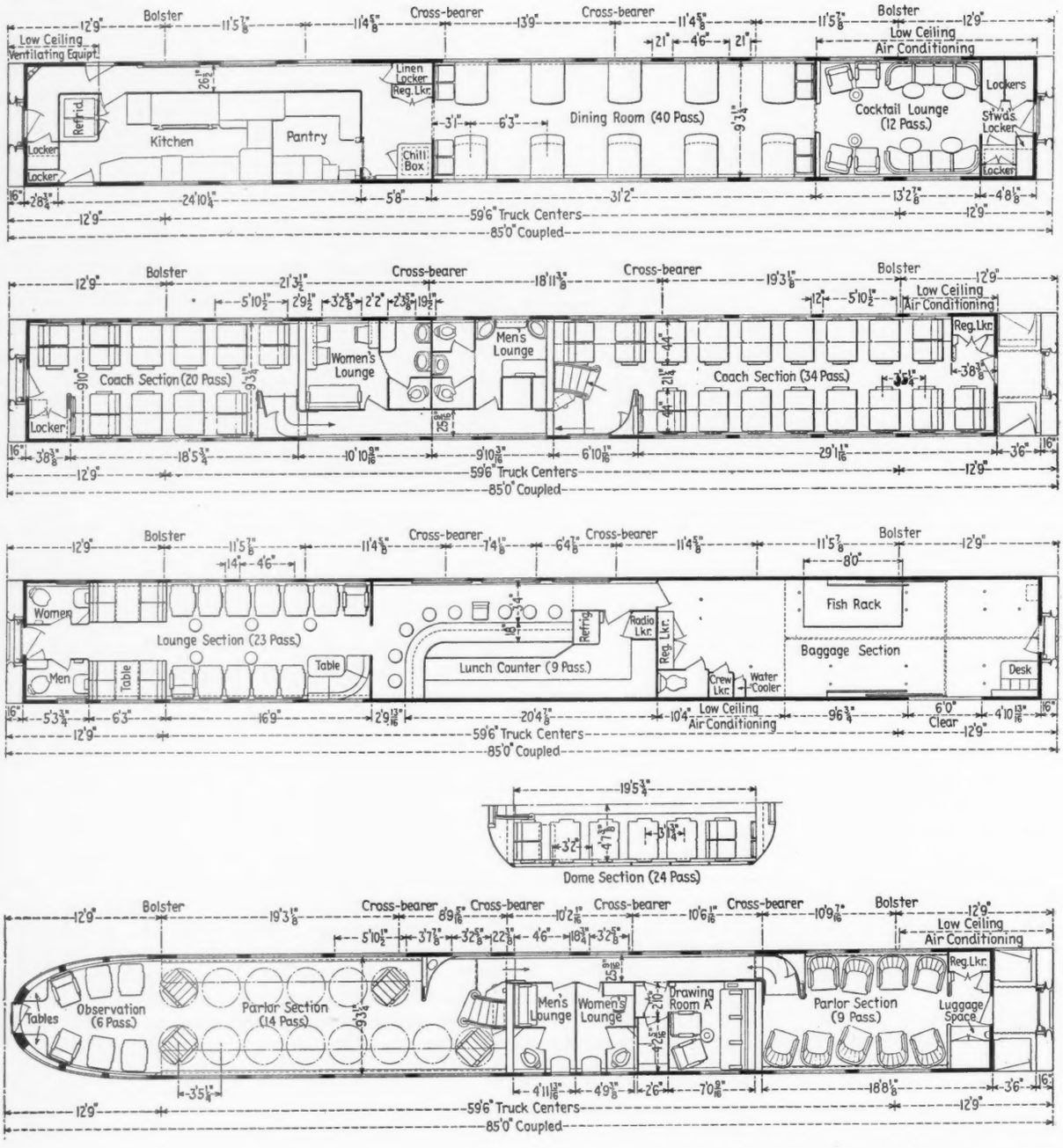
Power for lighting and air conditioning is supplied on each car by a Safety 25-kw. 32-volt d.c. generator with Spicer drive. Alternating current for fluorescent lighting is furnished by motor alternators. One 2-kw. machine is installed on each chair car and on the combination car, one 3-kw. machine on the parlor-observation car, and two 2-kw. machines on the dining car. Batteries are Exide, of 1,294 amp.hr. capacity.

Air conditioning is the Frigidaire electro-mechanical system of 10 tons' capacity. Condensers are the full flooded type. On the dome cars there are two evaporators, one of six tons' capacity for the main passenger compartments and the under-dome space, and one of four tons' capacity for the dome space.

Recirculated air passes through electrostatic Airmats and Dorex activated carbon deodorizers. In the dome chair cars and the parlor-observation car air is distributed through Multi-vent ceiling panels in the main passenger compartments and through outlets along the sides of the ceiling duct in the domes. Side outlets are also employed in the dining room of the diner and in the lounge in the combination car. Anemostats are employed in the cocktail lounge of the diner and in the lunch-counter section of the combination car.

Heating is the Vapor zone-control system. A main control panel both for heating and air cooling is installed in a control locker. Changeover from heating to cooling, or vice versa, is manual. Overhead heat is supplied from a steam coil in the evaporator; floor heat, from fin-tube radiators. Both are thermostatically controlled. Steam-heat train lines are 2½ in., with Vapor flexible metallic connections and end valves.

Kitchen ventilation is supplied from three sources. An air curtain at the doorway between the foyer and pantry supplies 500 cu. ft. per min. of air taken from the dining room through a grill in the foyer ceiling. At the front end of the kitchen a blower supplies 1,000 cu. ft. per min., of which 800 cu. ft. is fresh air from outside the car and 200 cu. ft is recirculated air taken from the passageway through a ceiling grill. The air supplied by this fan is heated by a steam coil under thermostatic control. There is no provision for cooling. An exhaust fan located over the range discharges air at the rate of 1,600 cu. ft. per min. and 100 cu. ft. per



Floor plans of the cars in the Wabash six-car "Blue Bird." The three chair cars and the parlor-observation car have dome observation compartments

min. is removed from the regulator locker through a separate fan.

Air is exhausted from the lunch-counter area of the combination car through a fan of 450 cu. ft. per min. capacity.

Frigidaire refrigerators are installed in the dining car and at the lunch counter. One of the refrigerators in each of these cars provides for ice-cube manufacture.

Fluorescent lighting is extensively used in all the cars. In the chair cars fluorescent fixtures are set in the center of the ceilings of the main passenger compartments, and are placed at the sides of the central ceiling panel in the domes. Reading lights under the bag racks are incandescent. The parlor-observation car has fluorescent fixtures both in the center of the ceiling and under the bag racks. In the dining room and cocktail lounge of the dining car and the lounge in the combination car fluorescent fixtures are arranged continuously around the sides at the ceiling. In the lunch-

PARTIAL LIST OF MATERIALS AND EQUIPMENT ON THE WABASH "BLUE BIRD"

Truck castings; bolster anchors	General Steel Castings Corp., Granite City, Ill.
Wheels; axles	Bethlehem Steel Co., Bethlehem, Pa.
Journal boxes	Hyatt Bearings Div., General Motors Corp., Harrison, N. J.
Sound insulating pads	United States Rubber Co., New York
Couplers and coupler yokes	National Malleable & Steel Castings Co., Cleveland, Ohio
Draft gear	Waugh Equipment Co., New York
Center pins	W. H. Miner, Inc., Chicago
Air-brake and signal equipment	Westinghouse Air Brake Co., Wilmerding, Pa.
Clasp brakes	American Steel Foundries, Chicago
Hand brakes	National Brake Co., New York
Air-conditioning equipment	Frigidaire Div., General Motors Corp., Dayton, Ohio
Air diffusers	Anemostat Corp. of America, New York
Air-diffuser panels	Pyle-National Co., Chicago
Air filters — fresh and return air	Farr Filter Co., Los Angeles, Calif.
Air filters — electrostatic	American Air Filter Co., Louisville, Ky.
Ventilating fans	B. F. Sturtevant Div., Westinghouse Electric Corp., Boston, Mass.
Dorex activated carbon	Turco Products Corp., New York
Heating and air-conditioning controls; train-line connector	Vapor Heating Corp., Chicago
Train line	A. M. Byers Co., Pittsburgh, Pa.
Insulation — steam train line	Johns-Manville, New York Union Asbestos & Rubber Co., Cicero, Ill.
Batteries	Electric Storage Battery Co., Philadelphia, Pa.
Battery charging and train-line receptacles	Pyle-National Co., Chicago
Communication circuit receptacles and connectors	Mines Equipment Co., St. Louis, Mo.
Genemotor; motor alternator	Safety Car Heating & Lighting Co., New York
Spicer drive	Spicer Manufacturing Div., Dana Corp., Toledo, Ohio
Inner diaphragm; vestibule curtains; window sash; window-shade mechanism; closure rubber	Adams & Westlake Co., Elkhart, Ind.
Glass, windows	Libbey-Owens-Ford Glass Co., Toledo, Ohio Pittsburgh Plate Glass Co., Pittsburgh, Pa.
Insulmat	J. W. Mortell Co., Kankakee, Ill.
Insulation:	
Diner and baggage cars	Johns-Manville, New York
Dome cars	Gustin-Bacon Manufacturing Co., Kansas City, Mo.
Floor rivets	Cherry Rivet Co., Los Angeles, Cal.
Venetian blinds	Ajax-Consolidated Co., Chicago
Smoking stands	Marshall Field & Co., Chicago
Vestibule flooring	Alan Wood Steel Co., Conshohocken, Pa.
Step treads	Morton Manufacturing Co., Chicago
Floor covering	Beck & Blatchford Co., Chicago Goodyear Tire & Rubber Co., Akron, Ohio
Carpet	James Lees & Sons Co., New York
Carpet pad	Koylon Div., United States Rubber Co., New York
Chairs and tables	General Fireproofing Co., Youngstown, Ohio S. Karpen & Bros., Chicago
Seats — chair cars and dome	Heywood-Wakefield Co., Gardner, Mass.
Light fixtures	Luminator, Inc., Chicago Safety Car Heating & Lighting Co., New York
Radio and public address system	Farnsworth Television & Radio Corp., Fort Wayne, Ind.
Metal-covered plywood	Haskelite Manufacturing Co., Grand Rapids, Mich. Met-L-Wood Corp., Chicago
Kitchen, pantry, and lunch-counter equipment	Walrus Manufacturing Co., Decatur, Ill.
Table tops	Formica Co., Cincinnati, Ohio
Refrigerators	General Electric Co., Schenectady, N. Y.
Counter and window sills	Formica Co., Cincinnati, Ohio Northern Industrial Chemical Co., Boston, Mass.
Odor absorbers	Tuco Products Corp., New York
Lucite in screens	E. I. du Pont de Nemours & Co., Wilmington, Del.
Wash stands	Crane Co., Chicago
Paper towel dispensers	A. P. W. Products Co., New York
Hoppers	Duner Co., Chicago
Copper tubing and sweat fittings	Chase Brass & Copper Co., Waterbury, Conn. Mueller Brass Co., Port Huron, Mich. Northern Indiana Brass Co., Elkhart, Ind.
Water heaters	Vapor Heating Corp., Chicago
Water coolers	Henry Giesel Co., Chicago Sunroc Refrigeration Co., Glen Riddle, Pa.
Fire extinguishers	Pyrene Manufacturing Co., Newark, N. J.
Door operators	National Pneumatic Co., Rahway, N. J.
Door closers	Russell & Erwin Div., American Hardware Corp., New Britain, Conn. Yale & Towne Manufacturing Co., Norton Door Closer Div., Chicago
Hardware	Midland Co., South Milwaukee, Wis. P. & F. Corbin Div., American Hardware Corp., New Britain, Conn.
Emergency rear light	Mars Signal Light Co., Chicago

counter area the lights are in individual incandescent fixtures. The lighting in all main passageways and in the underdome wash rooms is also fluorescent. The kitchen and pantry of the dining car and all vestibule lights are incandescent.

The train is equipped with the Farnsworth radio and public address system and two wire recorder channels. The antenna is on the combination car and the receiving set and master control station are in the lunch-counter section of this car. Loud-speakers are placed in the ceilings of the chair cars, parlor-observation car, dining car and lounge of the combination car.

There is also one in the drawing room in the parlor-observation car controlled by a five-point selector switch. This permits the choice of the public address circuit, the radio, either one of the two recorded programs available, or off. A door switch opens the speaker circuit when the drawing-room door is opened.

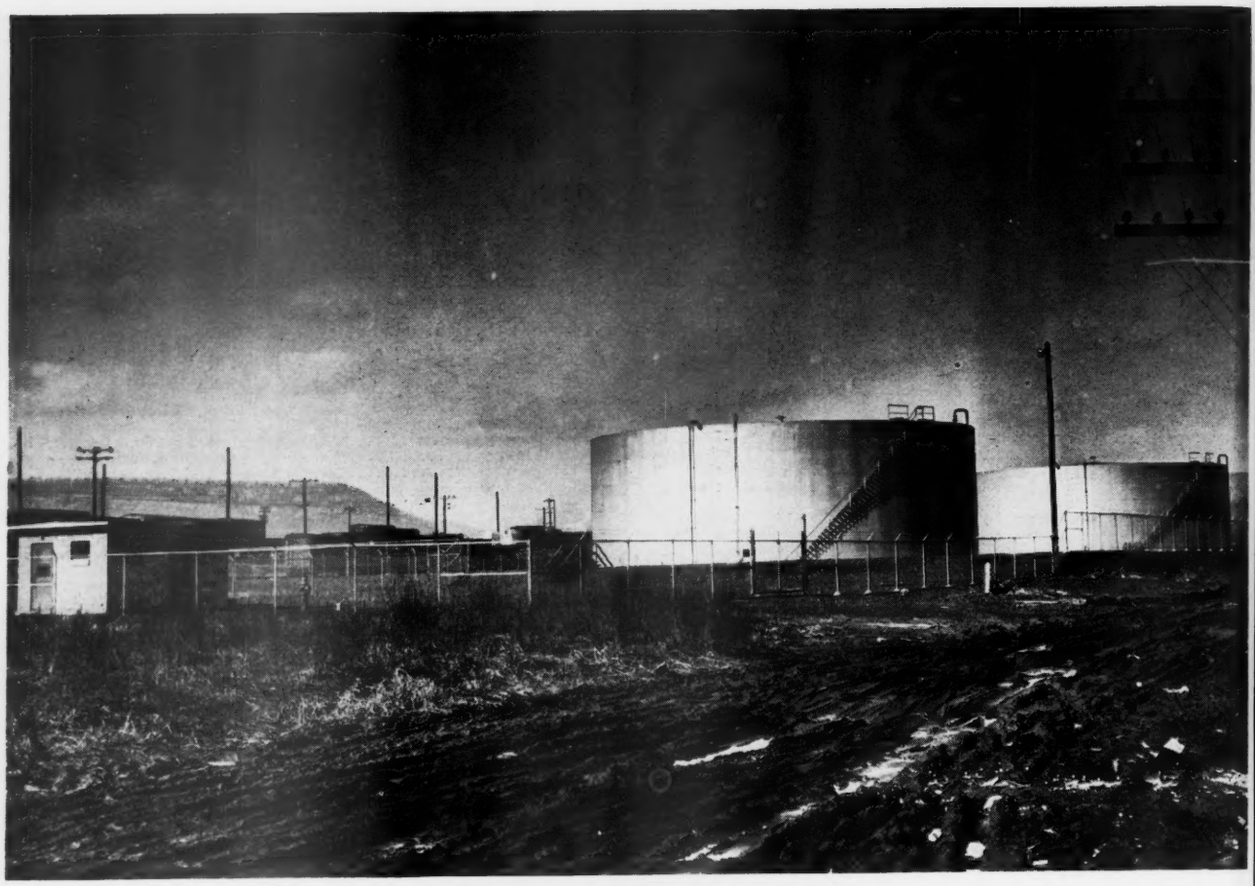
There are two public-address hand sets on the train, one at the steward's station in the dining car and the other at the radio locker in the counter section of the combination car. There is no telephone train line. At the rear end of the parlor-observation car, however, is a jack and telephone set for plugging into the Bell System at terminals.

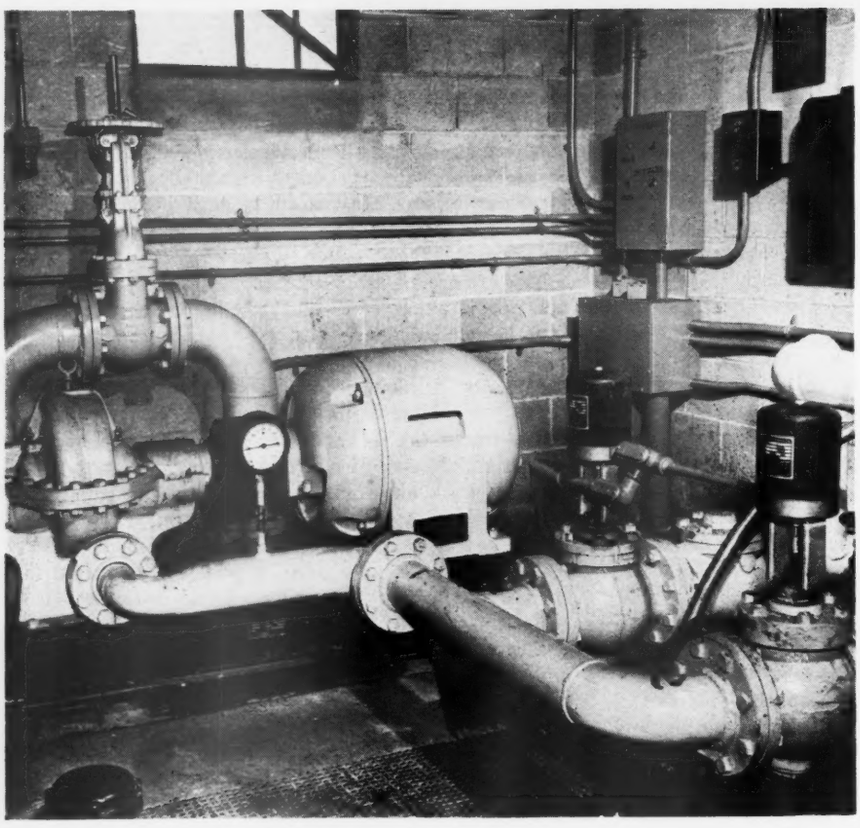
Water is carried in two 150-gal. tanks under each car. There are two additional 75-gal. tanks overhead in the kitchen of the dining car and two 50-gal. tanks at the lunch counter. In each case one is for hot water and one for cold. There are fillers on each side of the car for the overhead tanks. Electro-mechanical drinking-water coolers are placed in each dome car at the end of the under-dome corridor beside the stairway to the dome.

The air brakes are Westinghouse HSC type with 250 per cent braking ratio and 100 lb. cylinder pressure, with electro-pneumatic straight-air control. The equipment includes Westinghouse speed governors and decelostats without sand. There are no retaining valves.

The trucks are General Steel Castings equalizer type with combination coil and elliptical bolster springs and without shock absorbers. The wheel base is 8 ft. 6 in. and all axles are 6-in. by 11-in., equipped with Hyatt roller bearings. The wheels are 36-in. multiple-wear wrought steel. Sound-deadening pads of rubberized fabric are applied on the center plates, equalizer spring seats, side bearings and swing hangers.

The cars have National Malleable tight-lock couplers and Waughmat draft gears. There is an uncoupling mechanism on one side only. No buffers are on the cars now, but provision has been made for their future application. The closures between the ends of the cars include both inner and outer diaphragms. End doors are operated pneumatically.

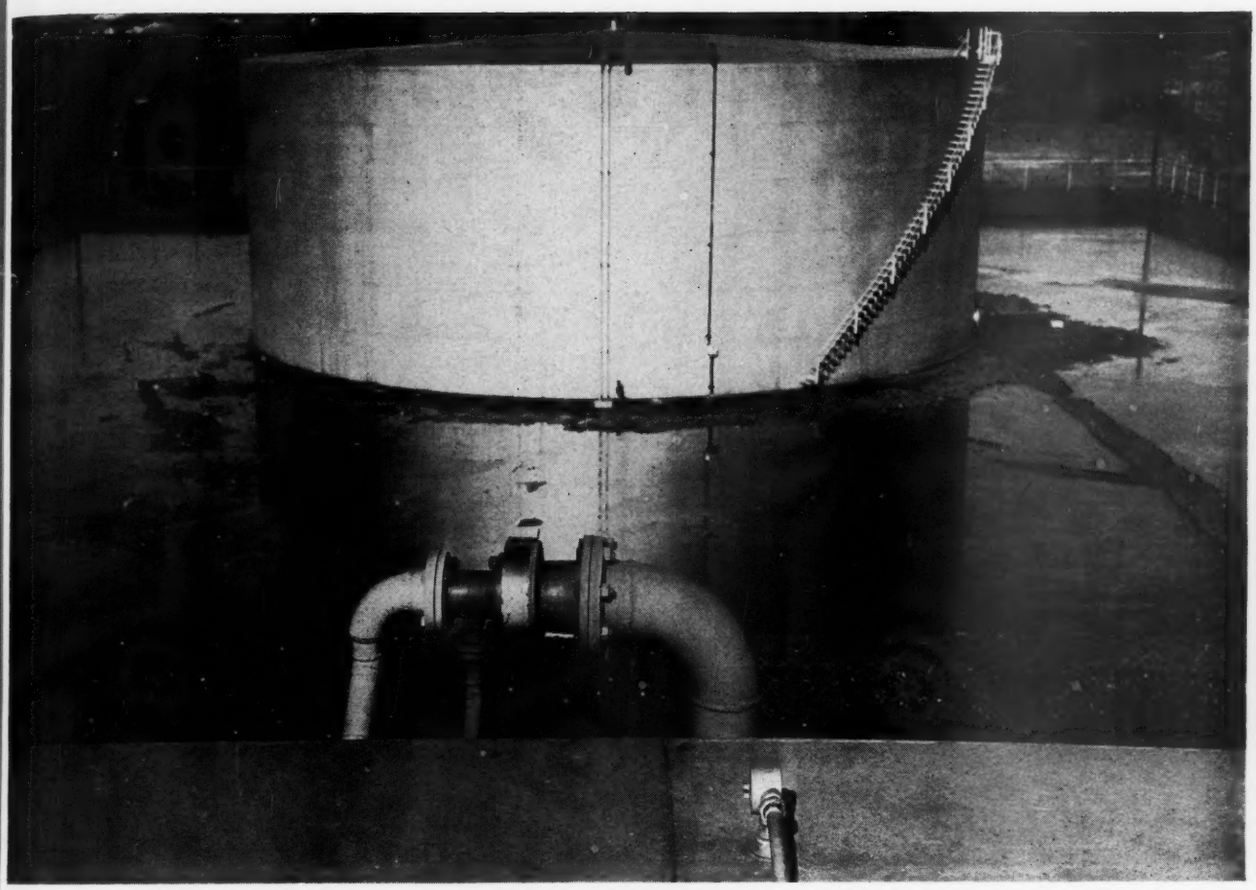




Above—General view of the Lucknow storage facilities, showing the pumphouse at the left and the two 2,000,-000-gal. tanks at the right

Facing page—Close-up of a thermoswitch and a foam maker on one side of tank No. 1. Beyond is tank No. 2

Left—The main water supply enters the system through the booster pump at the left and is taken off into two 6-in. lines, each controlled by motor-operated valves which may be seen at the right. When the system is activated, the proper valve opens automatically to release water to the tank containing the fire. Foam compound is controlled by a similar system



ROBOT FIREMAN GUARDS OIL TANKS

The Pennsylvania installs fully automatic foam system to protect against fires at one of its major storage points for Diesel fuel

An all-automatic, air-foam fire-protection system, reported as being the first in the railroad industry for safeguarding fuel-oil storage tanks, has been placed in service by the Pennsylvania at Lucknow, Pa., near Harrisburg. While a number of other railroad storage tanks elsewhere in the country are protected by air-foam units, the Lucknow installation is described as the only one that sounds an alarm and goes into action to extinguish a blaze without being touched by human hand.

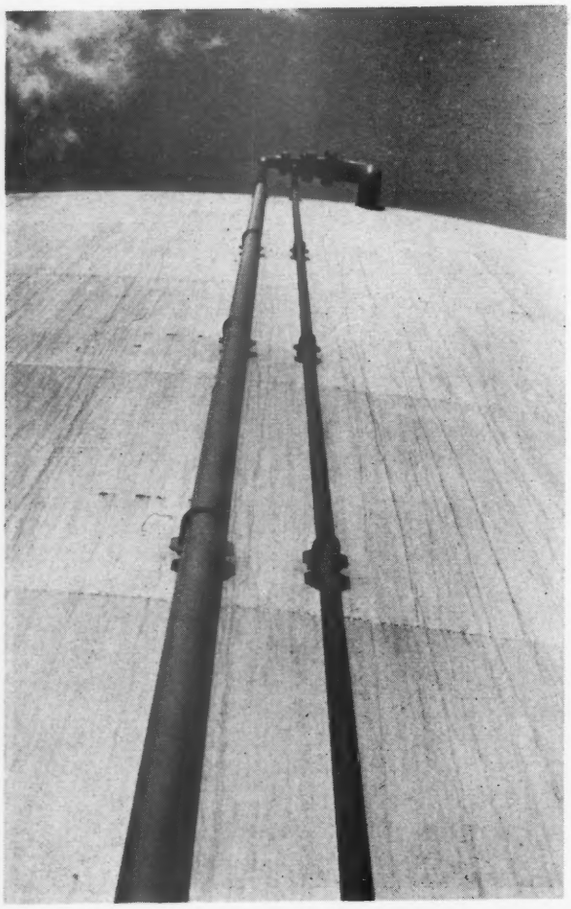
Actuated by thermostatic switches, the system delivers 8,000 gallons of smothering foam a minute over the surface of the oil in either of two protected tanks and, after the flames have been extinguished, resets itself for future operation.

The automatic unit, furnished by the Pyrene Manufacturing Company, Newark, N. J., was the answer to a problem involving location, economy and the need for fast, certain protection against fire. Harrisburg is the easterly terminal for passenger Diesels on the Pennsylvania, and Enola, just across the Susquehanna river, is the terminal for freight Diesels. The road recently completed large repair and servicing facilities at both points.

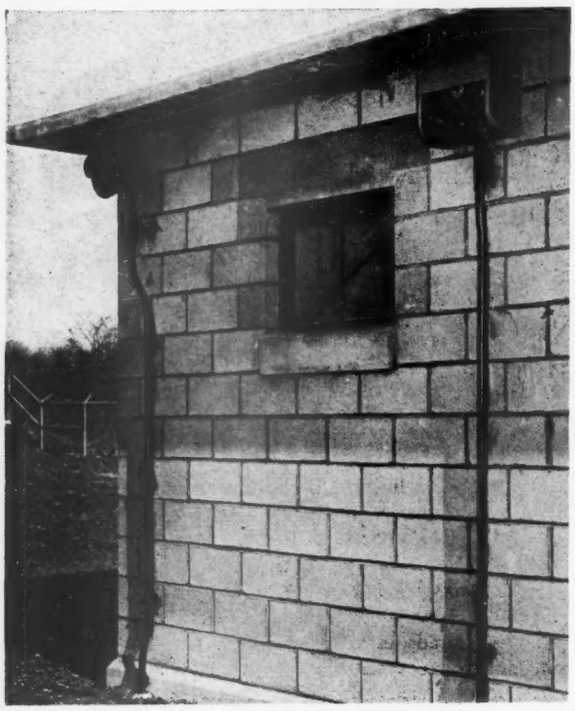
Storage Provided for 2,335,000 Gal.

Fuel oil is delivered to the Harrisburg servicing facility by rail, where five 67,000-gal. tanks are available for local storage. The main storage point, however, is Lucknow, about a mile to the west, where two 2,000,000-gal. tanks have been erected.

While the two tanks, each 36 feet high and 100 feet in diameter, adjoin the freight yards at Lucknow, they are remote from any community and are not readily accessible by road. Oil is pumped from Harrisburg to



Above—The pipe at the left is the 2½-in. water line and the smaller pipe is the 1¼-in. foam-compound line. Both lead to the foam-maker at the top of the tank. Below—The siren at the left and the gong at the right both sound when the system is activated



the Lucknow tanks for storage and is pumped back again when needed. Oil for use at Enola is pumped from the Lucknow storage tanks to Harrisburg where it is loaded in tank cars to be moved by rail to Enola.

No attendants are required at Lucknow to control the flow of oil to and from the tanks, as the pumps for this purpose are at Harrisburg. Even if it were possible to employ watchmen in the tank area on a 24-hr. schedule, this would not have been economical, since these men would have no other duties.

Details of System

These factors led to the adoption of the automatic foam system, the plans for which were prepared by the railroad in collaboration with Pyrene design engineers. Now completely installed and ready for an emergency, the system employs four thermostatic switches inside each of the tanks. These are set to function whenever the temperature in the tank reaches 212 deg. F. The pumphouse containing the foam-compound supply and the necessary pumps and connections is 200 feet from the nearest tank and 500 feet from the second tank.

The main water supply enters the pumphouse through a 6-in. line. Part of the water is taken off into a 2-in. pipe leading to a primary inductor. This device draws Pyrene foam compound from a 550-gal. tank through a 1¼-in. suction line. The compound, mixed with water, then moves under pressure through the 2-in. pipe which emerges from the pumphouse side by side with the main six-inch line. These lines lead to the base of each tank where the 6-in. water line branches into two 2½-in. lines, which extend to opposite sides of the tank.

Similarly, the foam compound line divides into two 1¼-in. pipes, which parallel the 2½-in. water line to opposite sides of the tank. The foam compound and water lines rise up the exterior surface of the tank to foam-makers on the inside lip. The foam-makers suck in air which is mixed with the water and the foam compound. The resulting foam is discharged through a curved pipe against the inside of the tank. Its initial force thus broken, the foam—from the two discharge pipes on opposite sides of each tank—spreads evenly over the oil surface in a smothering white blanket.

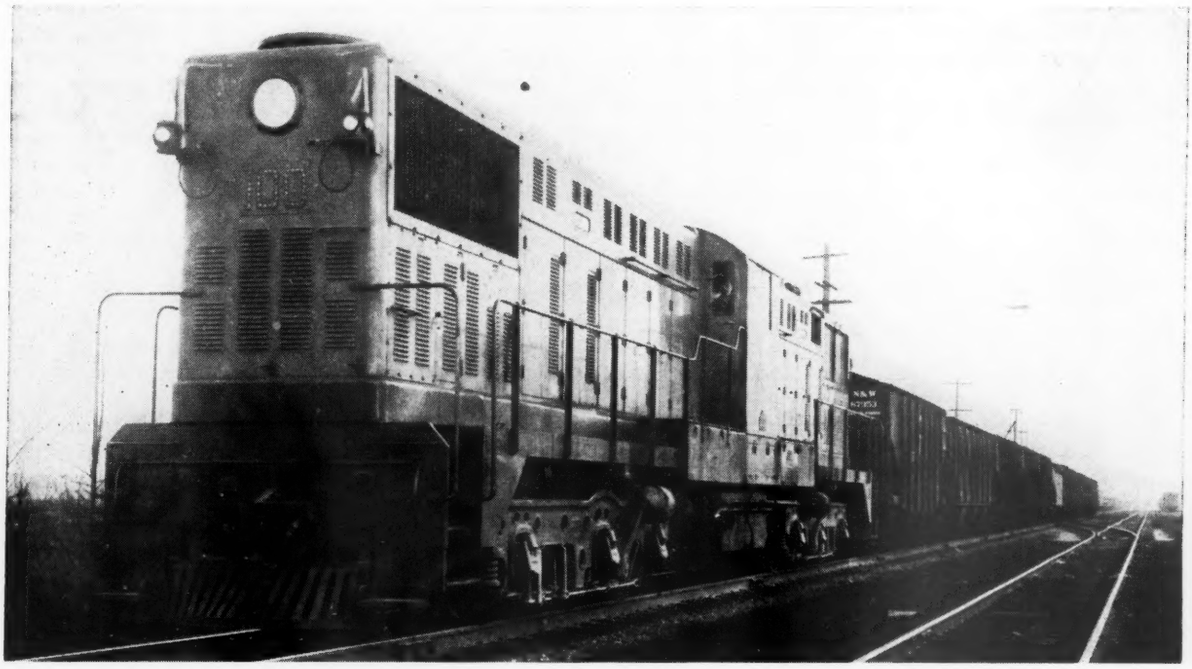
Operation of System

When one of the "thermoswitches" is actuated by rising temperature, a motor-operated valve is opened in the feed line leading from the pumphouse to the tank involved and an electrically driven pump starts the water through the system—all automatically. Within a short time, foam is being discharged at the rate of 8,000 gallons per min. The system operates for 22 minutes, after which an automatic time shutoff switch functions to stop the pumps. This is sufficient time, it is said, to deliver an adequate quantity of foam to kill any fire which might occur. The quantity of foam discharged in 22 minutes is 176,000 gallons, sufficient to cover the oil in the tank to a uniform depth of 3 feet. When any one of the automatic switches operates the system, a siren is also sounded to inform railroad men that a fire has broken out in one of the tanks.

Pennsylvania officers attended final acceptance tests conducted under simulated fire conditions. Operation of the automatic unit and the quality and volume of foam produced were considered highly satisfactory.

FULL POWER AT ALL SPEEDS

The modern locomotive transmission is basic to the success of the Diesel-electric locomotive—Complete railroad electrification may be in process



By CHARLES KERR, JR.
Consulting Transportation Engineer
Westinghouse Electric Corporation

Practically all locomotives under construction for domestic railroads utilize the electric transmission for the delivery of power from the locomotive prime mover to the locomotive driving axles. This adoption of the electric transmission has been one of the major reasons for the rapid disappearance of the reciprocating steam locomotive from the current locomotive market. In spite of this wide use, there has not always been a thorough appreciation of the contribution of the electric transmission to the modern locomotive. In this paper, an explanation of the electric transmission is presented primarily for railroad operating and mechanical personnel with a minimum of technical description, since much of the mystery surrounding locomotive transmissions has come from a tendency to discuss their operation in electrical or highly technical terms.

The two most revolutionary changes in motive power practice brought about by the electric transmission were: first, the introduction of the constant-horsepower locomotive, providing full power at all speeds, which made a better self-contained motive power device for the haulage of rail traffic; second, high efficiency prime movers like the Diesel engine, the steam turbine and the gas turbine become practical devices for broad application in locomotive service by its adoption.

A rather clear appreciation of locomotive transmissions can be secured by examining the operating characteristics of a theoretically perfect locomotive powered by any prime mover. This perfect locomotive would produce the full horsepower of the prime mover at the driving wheels at all speeds, and at all tractive force values within the limits of adhesion. The operating curves of this perfect locomotive are shown by Fig. 1. As the product of tractive force and speed is a direct measure of horsepower, the tractive force-speed curve of the constant-horsepower locomotive is definitely fixed by the horsepower of its prime mover, and is independent of all other factors within limits of permissible adhesion.

Prime Movers Available

For locomotives which carry their own power plants, four types of prime movers are available—the reciprocating steam engine, the Diesel engine, the steam turbine and the gas turbine. Only two general types of

transmissions are available to connect these prime movers to the driving axles of a locomotive—the direct mechanical type and the torque converter type.

In the direct mechanical transmissions, the prime movers deliver power to the driving wheels through side rods, fixed gearing, or a combination of both. In these direct transmissions, the speed and output of the locomotive must conform in a fixed ratio to the speed and output of the prime mover. The locomotive performance is thus neither better nor worse than that of the prime mover by which it is powered.

Of all known prime movers, the reciprocating steam engine is best suited for universal motive power use with direct mechanical transmissions. This probably explains why the reciprocating steam locomotive remained in its dominant position while locomotive practice was confined to the use of mechanical transmissions.

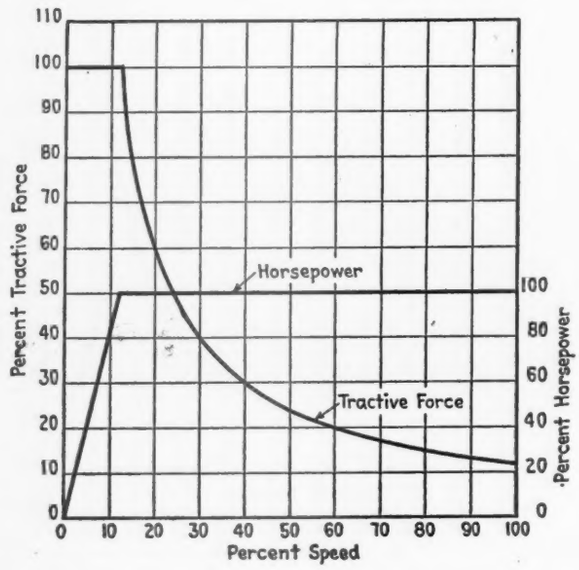


Fig. 1 (Left)—Performance curve of a constant horsepower locomotive

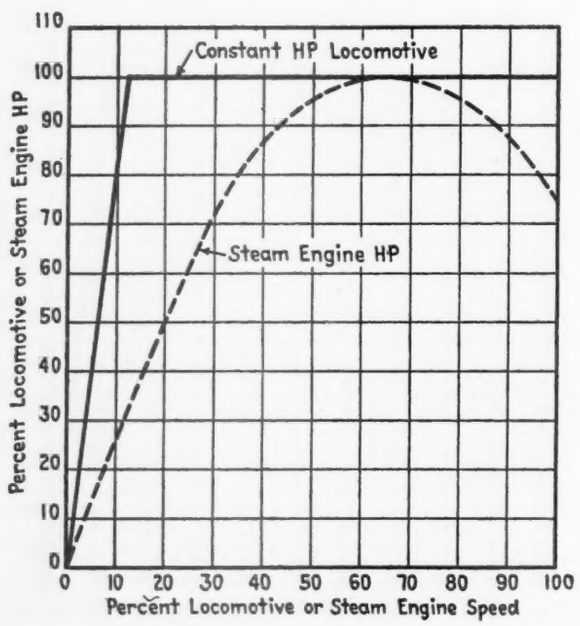

Constant HP Locomotive
Steam Engine HP
Percent Locomotive or Steam Engine HP
Percent Locomotive or Steam Engine Speed

Fig. 2 (Below left)—A comparison of steam locomotive hp. with that of a constant hp. locomotive

Although it is a thoroughly practical type of motive power for rail service, the steam locomotive always failed to meet the requirements of a theoretically perfect locomotive. As an illustration of this deficiency, the curves of Fig. 2 have been drawn to show the horsepower output by a typical steam locomotive in contrast to the constant-horsepower locomotive. The output of any prime mover, whether a steam engine or other types, varies with its speed of operation, and will generally reach a maximum at only one speed. This is fundamental. Thus when the prime mover is directly coupled to the drivers, as in conventional steam power, the locomotive output will become a maximum at only one speed, and will be deficient at all other speeds. Consequently, as motive power devices, locomotives of this character will suffer by comparison with any theoretical perfect standard. This deficiency occurs over a wide speed range, and in actual practice is most telling in the starting and lower speed ranges.

Economies Effected through Efficiency

The Diesel engine, the steam turbine and the gas turbine offer opportunities for real economy in motive power service, principally because they operate at higher efficiency than the reciprocating steam engine. Their inherent characteristics, however, are so poorly suited in one way or another for universal traction purposes that an alternative to the direct, or fixed-ratio, transmission of power to the driving wheels is absolutely essential. Without going into the characteristics of all of

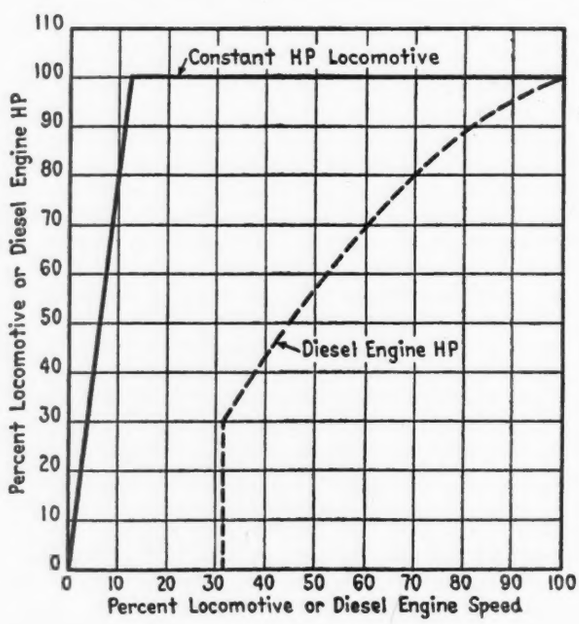

Constant HP Locomotive
Diesel Engine HP
Percent Locomotive or Diesel Engine HP
Percent Locomotive or Diesel Engine Speed

Fig. 3 (Below right)—Speed-horsepower curves for a constant-hp. locomotive and for a locomotive having Diesel engine with direct drive

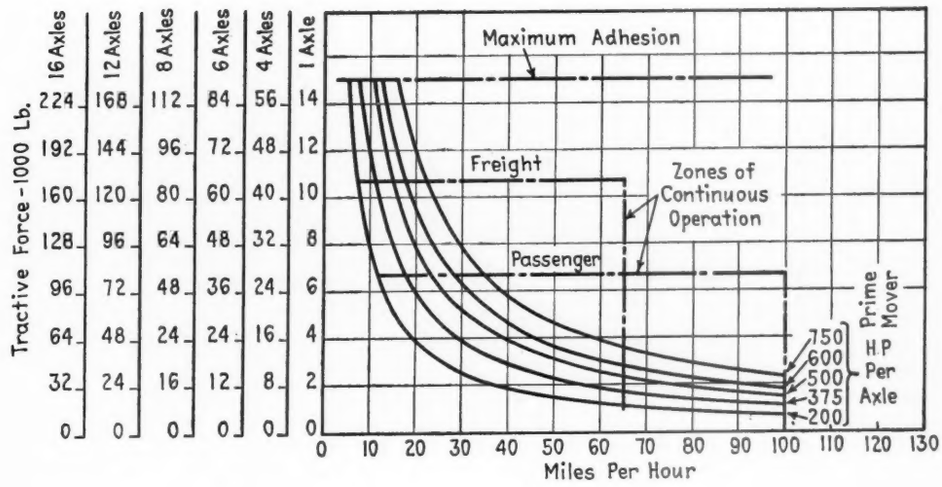


Fig. 4 — Approximate performance curves for locomotives with electric transmissions

these machines, the theoretical output of a Diesel locomotive with a direct fixed ratio drive might suffice as an illustration. Should anyone be so foolish as to build a Diesel locomotive of this type, its performance would be essentially as illustrated by Fig. 3. One glance at this curve will show its total and complete inapplicability for traction purposes.

In automotive practice, the internal combustion engine has been made acceptable by the use of torque converter transmissions. The same has been true in locomotive practice. The first automotive method of solving this problem was the conventional gear shift and clutch, followed in recent years by automatic transmissions and hydraulic torque converters.

The perfect locomotive torque converter transmission, in mechanical terms, would be a drive with an infinite number of gear ratios which would permit the prime mover to operate at its optimum speed and deliver full horsepower to the driving wheels at any and all train speeds. This means that the tractive force at one-half speed is twice full-speed tractive force, or at one quarter speed, four times full-speed tractive force, and so forth over the whole speed range. Referring again to Fig. 3, a perfect torque converter would permit the Diesel engine to operate at 100 per cent speed, the only point where it can produce 100 per cent horsepower, and deliver at the drivers 100 per cent horsepower at any locomotive speed within the limits of adhesion, thus securing a theoretically perfect locomotive. Except for the inability of any transmission to operate at 100 per cent efficiency, the electric transmission essentially meets these requirements, providing a close approximation to the perfect self-propelled locomotive.

Electric Transmission

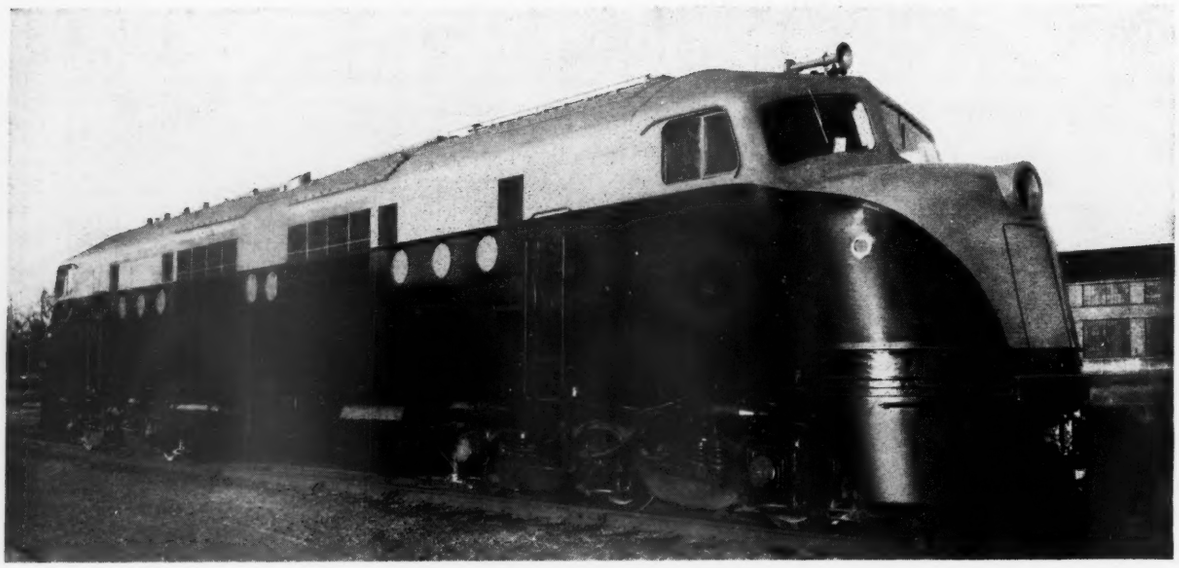
In the electric transmission, torque conversion is accomplished by electrical means. Its theory is relatively simple. The prime mover drives an electric generator which delivers electric energy to the traction motors, one motor for each driving axle. In an electrical system, current supplied to the traction motors may be considered equivalent to locomotive tractive force, and voltage to these motors equivalent to locomotive speed. Thus, if the generator output in current and voltage is made to resemble the tractive force-speed curve of a constant-horsepower locomotive, the traction motors will automatically provide constant horsepower at the drivers. The generators, with their control, are made to operate in this manner. With reasonable accuracy, the tractive force scale of the constant horsepower locomotive, Fig. 1, might be called generator or traction motor current, and the speed scale called generator or traction motor voltage.

Expressed in another way, the product of tractive force and speed is a measure of locomotive horsepower output at the drivers. The product of motor current and voltage is a measure of their horsepower output. If the latter are properly controlled to load the prime mover to its full horsepower capacity, the locomotive output will always be relatively constant.

As the electric transmission is inherently a torque converter or constant horsepower drive, the performance of all locomotives which use it, irrespective of their power plants, assumes a very definite pattern, depending upon the horsepower of their prime movers. In fact, this pattern is so closely fixed that one series of curves might be prepared, such as Fig. 4, which will give, with reasonable accuracy, the performance of all self-propelled locomotives with power plants of fixed maximum capacity. Knowing the prime mover horsepower provided per driving axle, the potential speed-tractive force performance of any locomotive can be secured from these curves.

For many reasons, some technical and some economic, it has been found expedient to build electrical transmissions for operation within definite ranges of tractive force and speed, and to limit the weight on locomotive axles to certain limits. To be applicable to actual available locomotives, the performance curves of Fig. 4 have been modified to indicate approximate present design limitations for typical passenger and freight locomotives.

There are several interesting things about the modern locomotive having an electric transmission. Its performance as a locomotive is unaffected by the type of prime mover by which it is powered. For a given concentration of horsepower per axle, it will always have the same speed-tractive force curve. The ratings and gear ratios of the electrical equipment only affect the



range of speed and tractive force wherein it may be satisfactorily operated, and its maximum tractive force is determined solely by its weight on drivers. And lastly, but most important, constant horsepower is available at the drivers at essentially all speeds.

Advantages and Economies

Many operating advantages and economies have been attributed to the modern Diesel locomotive with an electric transmission. Certain of these advantages and economies are the result of the electric transmission, and would be secured with any locomotive utilizing this transmission. As considerable confusion exists concerning the part played in the success of the Diesel by the electric transmission, a brief summary of its contributions to locomotive practice might be in order.

First and foremost, the electric transmission, acting as a torque converter, produced the constant-horsepower locomotive which first gave to the railroads a transportation tool enabling full power to be utilized at all speeds. Thus, to replace the steam locomotive, a better transportation device became available. This ability to produce full power at all speeds also gave to the railroads motive power which offered the greatest degree of flexibility because the constant horsepower characteristic made the same motive power suitable for all types of operation from drag service to high speed. By securing this flexibility, long engine runs became practical because a single locomotive no longer became handicapped by grade or profile conditions. Long engine runs have made for high availability and low maintenance expense.

The high starting and running tractive forces secured in the modern locomotive are exclusively the result of the electric transmission. These high values, secured without loss in horsepower, have permitted heavier trains to be hauled, have made possible the elimination of helper service on many ruling grades, and have generally caused the disappearance of stalled trains due to inadequate starting capacity. These features alone provide operating economies of huge magnitude. Besides, because full power is always available, many improved operations have been secured with a reduction in total prime mover horsepower.

Full use of the constant-horsepower transmission demands a far greater weight on drivers than the steam locomotive ever provided, and consequently, more driving axles.

Without these added axles, many of its advantages could never be secured. The electric transmission, permitting power to be carried to the many drivers through wires, is the ideal mechanism for locomotives so constructed.

The Diesel locomotive introduced the simple truck-type running gear to railroad operation on a large scale. This greatly improved and simplified construction has been made practical by the electric transmission. With its use, standardized construction also came into prominence for the first time, carrying with it mass production to lower first costs. The electric transmission admirably fits into mass production and standardization.

No discussion of the electric transmission would be complete without reference to electric braking. For roads operating in mountainous territory, this feature of the electric drive has produced operating improvements of untold value.

Other Prime Movers May Be Used

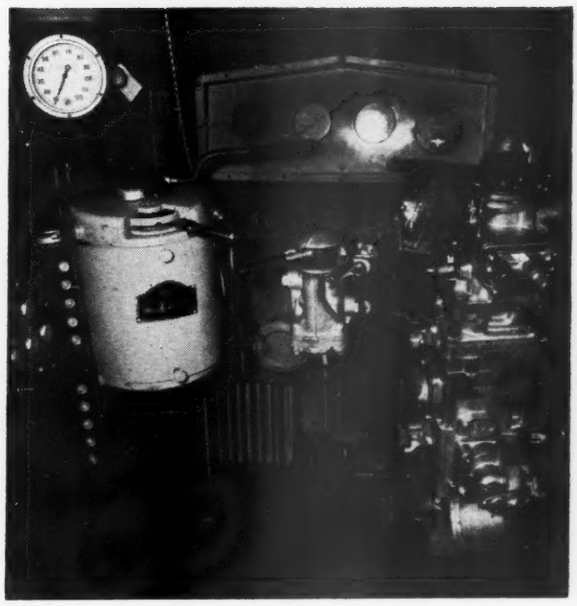
And lastly, the electric transmission has made possible the full utilization of highly economical prime movers like the Diesel engine, the steam turbine and the gas turbine, which otherwise would never see wide application in motive power service. It is highly probable that we are witnessing the complete electrification of our railroad system with all locomotives powered by electric motors, with some carrying high efficiency prime movers and some receiving power from overhead trolley systems.

The constant-horsepower locomotive has given to the railroads a much improved motive power device. But this improvement is accompanied by certain obligations on the part of the railroad operating forces if maximum benefits are to be secured from these locomotives. They will not withstand certain abuses that the steam locomotive endured, and improper application and use are open invitations to high maintenance costs and road failures.

One of the functions which electrical engineers might well perform is a thorough education of the men who operate these locomotives in regard to their best use. Since the direct operating expenses of motive power on Class I roads exceeds two billion dollars annually, a very fertile field for cost reduction exists in proper handling of this power.

Looking to the future, we may well inquire what changes in the electric transmission equipment may be expected. In regard to its efficiency, there is practically no opportunity for any major changes. The range of safe operating speeds and tractive forces may be somewhat expanded to make the equipment more foolproof against improper operation. Probably the greatest changes to be expected are those which will lead to lower maintenance, greater simplification, and removal of sources of road failures and delays. The latter improvements would have a greater appeal to the operating forces than any other possible improvement because its performance otherwise already so closely matches theoretical perfection.

At the end of 1949, approximately 45,000,000 rated-hp. of electrical rotating apparatus, including motors,



generators, and auxiliary apparatus, were in service on the American railroads. Considering the rate at which this equipment is being installed, the railroads of the country are becoming one of the outstanding users of electrical apparatus. This leaves a challenge of huge magnitude to the electrical engineers to see that this apparatus is used to its best advantages.

Communications . . .

The Kind of Mail That Makes The Editor Gratefully Happy

CHICAGO

TO THE EDITOR:

I have just read the main editorial in the March 4 issue of *Railway Age,* entitled "What Really Happened on the Long Island?" It is so plain and so sensible — and I am afraid also so needed — that I am prompted to write you this note of appreciation and commendation, for of course the philosophy that is reflected in the editorial may well be applied to very many other matters and situations than the unfortunate accident on the Long Island.

In the editorial you have invited the suggestions and criticisms of your railway readers to enable you to do the job progressively better. I do not at the moment have any specific suggestion to offer and certainly no (unfavorable) criticism. I have long been an interested and appreciative reader of *Railway Age,* and in particular have been an admirer of its editorial expressions which in the main I have been disposed to attribute to Mr. Dunn, and I have wondered who there would be who could take up his pen and carry on in his fashion when he might elect to lay it down. Confidence is growing that this job of "taking over" can be and will be adequately and acceptably done — and now, having read the editorial "What Really Happened on the Long Island?" I want to say (but of course with not the slightest discounting of the work that Mr. Dunn has been doing) that I am harboring no misgivings.

The railroad industry is confronted with many problems, and I am sure the stimulus afforded by your publication to the railroad men and others will continue to be a helpful influence toward finding the solutions to these problems.

R. B. BATTEY
General Freight Traffic Manager,
Chicago, Burlington & Quincy

MILWAUKEE 3, WIS.

TO THE EDITOR:

I recently heard your transportation editor, Bill Schmidt, give his talk, "It Can Happen Here," before the Transportation Club in Milwaukee. That man Schmidt is a whirlwind and his talk is without question the most effective exposition that I have ever heard of the practical fallacies of socialism.

You are doing a great service, not only to the railroads, but to the entire American business community, by sending Bill around to give these talks. His audience here was seriously intent during the speech, and wildly enthusiastic at its close. I hope that Bill will be able to carry this message to tens of thousands of people in key places, and I have asked him if he could possibly find the time to put essentially these remarks into written form as an article for "Trains."

My sincere appreciation to you for this and all of your other efforts on behalf of a sound, privately managed railroad industry.

A. C. KALMBACH
President,
Kalmbach Publishing Co.

The classroom in which the C. & E. I. Diesel Club meets is equipped with slide and sound motion picture projectors, blackboard, bench for individual parts study and 75 comfortable chairs

C. & E. I. Has Own Diesel Club

What is probably unique in the annals of both American railroading and Diesel clubs was initiated October 18, 1949, on the Chicago & Eastern Illinois in Danville, Ill.

It is a Diesel club entirely within one railroad, and is known as the Danville Railroad Diesel Club of the C. & E. I. R. R.

The Membership

The club includes in its membership road men, shop men and supervisors, and thereby serves as an excellent liaison for the interchange of information on problems involved in all phases of Diesel operation. It gives the shop man closer acquaintance with the problems of the road man, and vice versa, and it acquaints supervisors more intimately with the problems of both. The club further serves to familiarize the men of one shop craft with the work of men of another craft, and in this way aids in the coordination of maintenance work. It furthers cooperation and mutual understanding between workmen of different crafts by giving each an understanding of the work of the others.

Danville was selected as the headquarters for the club because all heavy Diesel repairs are made at that point in the Diesel shop converted from the former steam back shop; the latter is no longer required as the C. & E. I. expects to be fully Dieselized in May, 1950. Danville is also a central division point on the road and convenient for engine crews.

Organization of the Club

Officers of the club are elected from various ranks of employees. The president is an electrician; an enginehouse foreman is vice-president and chairman of the membership committee. The secretary is a sheet metal worker and the sergeant-at-arms is an air brake foreman. The advisory committee is composed of the apprentice instructor and one man each from the machinists, the electricians, the sheet metal workers, the enginemen and the foremen. The topic committee includes a machinist, an electrician, a sheet metal worker and an engineman, with a foreman as chairman.

The present membership is about 130, and the average attendance at each evening meeting is 65 to 70. Sixteen members have not missed one of the nine meetings held so far. There are two evening meetings a month from 7:00 to 9:00. To accommodate additional road men and the shop men on the second and third tricks, two afternoon meetings are held each month from 1:15 to 2:45. No dues are charged, all costs being absorbed by the railroad. The railroad furnishes for the use of the club a room 18 ft. by 45 ft., of which 36 ft.

is devoted to a meeting room with 75 comfortable chairs, while the remainder is used for office space and files. A small area on the floor in the front of the room is used to exhibit parts that have failed in service. The club was also given a 16-mm. sound film projector, a sound-strip film projector, a slide projector and a projector lantern.

The club is currently building up a lending library where Diesel literature will be loaned out to members under a system similar to that employed by public libraries. A file of visual aids to education has been built up and includes films from the University of Illinois, the National Safety Council and various manufacturers, and complete set of slides from Electro-Motive.

Meetings Feature Variety

The program for each meeting is arranged so far as possible to include one or more subjects of interest to each of the shop crafts and to the operating men. A typical meeting begins at seven sharp with an educational movie. This is followed by a brief business meeting, after which a paper is presented either by a C. & E. I. man or by an invited speaker. Each meeting includes a case history of an actual Diesel failure that has occurred on the C. & E. I. If available, a film on the general subject of the failure follows the case history. For example, if the failure involved an improperly applied cylinder head, the movie that would follow would deal with the proper application of cylinder heads. Questions which were submitted at the previous meeting are answered next and written questions to be answered at the subsequent meeting are collected. The answer to each question is prepared by a specialist on the railroad in the line of work which the question involves. In general, the procedure followed with the main paper is to present talks covering fundamentals of the equipment first; later meetings will be addressed by outside speakers.

Convenience to Members Stressed

The club was founded initially by a group composed of 11 foremen, 21 mechanics, 2 apprentices, 4 road men and 6 men in miscellaneous classifications. Among the first things done was to prepare mimeographed lists of questions for potential members to vote for their preferences on a number of details about the club. The first questionnaire included questions on the preference for the day of the week the meeting should be held, time of starting, number of meetings per month, whether notification was to be by foreman or by bulletin board, how long the meetings should last, whether or not to have a question period, and if so, for how long, etc.

The second questionnaire was a follow-up of the first. For example, it asked whether the second and fourth Tuesdays were the best time to meet after these were chosen by the first questionnaire. The response indicated that the interpretation of the answers on the first poll was correct; the second and fourth Tuesday was voted best by a 15-to-1 majority and the 7:00 p. m. starting time by 37 to 1. New subjects included on the second questionnaire collected opinions on whether smoking should be permitted, whether safety pictures are liked, and what type of special picture, e. g., industrial, travel, cartoons, etc., were preferred. It is interesting to note that educational films received the most votes, followed by industrial and travel in the top three classifications.

At present the membership includes 15 foremen, 17 road men, 14 office men (draftsmen, clerks, management men, etc.), and the remainder men of the shop crafts.

Officers of the Diesel Club looking over an injector held by Mr. Blue, apprentice instructor on the C. & E. I.

New Facilities Expedite Communications on the

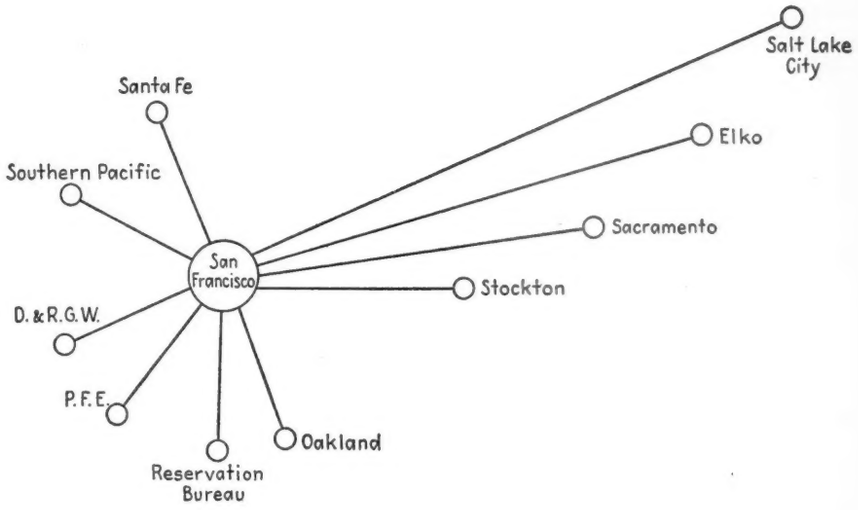
Increased message capacity, better service to shippers, and a saving of $48,000 annually have been brought about by installing printing telegraph and long-distance telephone equipment which is carrier-operated on existing line wires

Above—Right to left—automatic tape winder, reperforator and transmitter. Below—General view of "GO" office, showing printing telegraph equipment with receiving printers at left and transmitters at right

The Western Pacific has recently completed extensive improvements in its communications facilities, including long-distance telephone service between headquarters and outlying offices, and also printing telegraph between operating headquarters, yards and traffic offices. The additional line circuits were secured for the most part by installing modern electronic devices, on carrier equipment, by which the existing line wires are used to carry impulses of several different high frequencies. The saving in one item alone —long-distance telephone calls—is about $48,000 annually.

The main line of the Western Pacific extends 928 miles from San Francisco to Salt Lake City. Here the principal connection is with the Denver & Rio Grande Western for Denver and Pueblo, where connections are made with other roads to form through transcontinental

Western Pacific



Schematic diagram of long-haul printing telegraph service

routes. The general offices of the Western Pacific are in San Francisco, with important offices also at Salt Lake City. The headquarters of the Eastern division are at Elko, Nev., and of the Western division at Sacramento. In the San Francisco Bay area the Western Pacific serves numerous docks, industries, and warehouses. A branch extends south from Niles along the east side of the bay to San Jose and on into a fruit-growing area. At Sacramento and Marysville the Western Pacific connects with its subsidiary, the Sacramento Northern, which serves numerous towns in the Sacramento valley as well as industrial areas in the north part of the San Francisco Bay area. There is a connection at Stockton with another subsidiary, the Tidewater Southern, which extends through part of the San Joaquin valley.

The Facilities Replaced

At Stockton, 94 miles from San Francisco, the Western Pacific has a large freight yard from which westbound freight is distributed to the San Francisco Bay area and to various places in the broad agricultural areas in the Sacramento valley to the north, in the San Joaquin valley to the south, and in the Santa Clara valley to the south of Niles and San Jose. Similarly, traffic from all these areas is brought to Stockton yard to be made up in eastbound trains. Also at Stockton, the Western Pacific interchanges traffic with the Santa Fe, which extends south through the lower San Joaquin valley and on to southern California. The principal through route of the Western Pacific is east-and-west between Salt Lake City and points in California. On this east-and-west route, from Keddie, Cal., 281 miles from San Francisco, the Western Pacific has a secondary line extending north 112 miles to Bieber, Cal., where it connects with the Great Northern to points in Oregon and Washington. Thus, the section of the Western Pacific between Stockton and Keddie is part of a north-and-south route linking Seattle and Portland on the north with San Francisco and, through its Santa Fe connection, with Southern California.

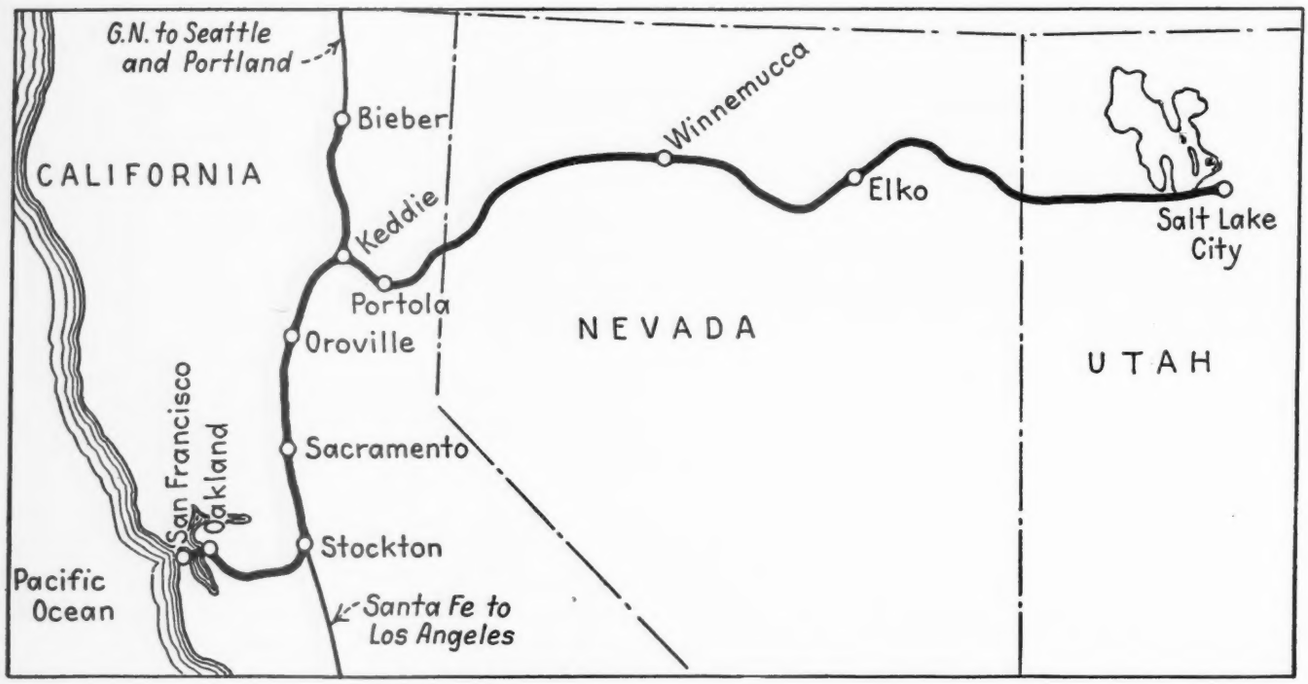
Before undertaking the recent program of improvements in communications facilities, the Western Pacific made little use of the printing telegraph and, therefore, much of its message traffic was handled by Morse system. Capacity was available for only the most urgent railroad business, and some of this had to go to outside commercial companies. No attempt was made to transmit passing reports and train consists in advance of or concurrently with train movements so that the information would be available ahead of train arrivals. Telephone train dispatching was employed on the main line between San Francisco and Salt Lake City, but no through telephone circuits were available between important offices and many long-distance calls had to be made over commercial lines.

The new communications facilities were planned with the objective of providing complete and adequate communications, employing printing telegraph for the transmission of all messages, including passing reports and train consists, and making the telephone generally available for conversation locally on the railroad, as well as for long-distance connections between important offices. On the Western Pacific the "train consist" is a list of the cars in a train showing car initials, numbers, weights and destinations. The passing reports include that information, plus all further notations on waybills that are necessary for the work of the car service bureau, as well as of the traffic department in contacting shippers and consignees.

The additional Teletype and long-distance telephone circuits were obtained in various ways: (1) By direct wire, (2) by the simplex leg of phone pairs and (3) by carrier circuits superimposed over the existing train dispatching telephone pairs. Arrangements of the line circuits and carrier equipment are explained in detail in an article in the February issue of *Railway Signaling and Communications.*

Tape Transmission

A basic principle in the printer operations on the Western Pacific is that all message traffic is handled by tape transmitters at the rate of 61 words per minute, except on the direct-wire circuits in San Francisco, such



Map of the Western Pacific main lines showing locations of offices served by new communication facilities

as between the Reservation Bureau, or Pacific Fruit Express and the switching center in "GO," the main office. One of the accompanying illustrations is a general view of the Teletype equipment in "GO" office in San Francisco. The 10 page printers are on a table at the left in the view, while on a table to the right are three transmitters with tape reperforators and three transmitters associated with the perforators.

How It Works

In "GO" office, all the Teletype equipment, such as printers, transmitters and reperforators, as well as all the incoming printer circuits, are connected to a specially constructed switchboard, known as a "switching center," which is handled by an operator with a monitor send-receive printer. When any distant office rings in by opening the line, the signal lamp on the affected circuit is lighted and a buzzer is operated, thereby providing both a visible and audible signal to indicate what office is calling. The operator then inserts the monitor in the answer jack and ascertains whether the calling office wishes a printer or desires to be connected through to an office or offices beyond. If the latter is desired, the cut-through circuits are used and the calling office is cut through to the officies desired. This method has the advantage that all offices addressed will receive the message as it is being transmitted from the originating office, thus expediting service as well as eliminating the necessity of reperforating and handling of tape for a second transmission in "GO" office. Of course, if the line to one or more of the offices addressed is busy at the time of transmission, the operator can insert a reperforator in the circuit to produce a tape which can be run as soon as the busy circuits are cleared.

The Western Pacific has manually operated private-branch telephone exchanges at nine cities—San Francisco with 300 lines; Stockton, 60 lines; Sacramento, 100 lines; Oroville, 20 lines; Keddie, 20 lines; Portola, 20 lines; Winnemucca, 10 lines; Elko, 20 lines; and Salt Lake City, 240 lines. These exchanges are now connected by 13 long-distance circuits which were derived, for the most part, by installing single-channel carrier.

Local telephone service between division headquarters and all local stations at which agents are on duty, as well as to the homes of section foremen and signal maintainers, is available through a circuit with selector calling, such as is used in telephone train dispatching. The overall telephone facilities, other than train dispatching, thus include the P. B. X. at ten cities, the local selector calling lines to all wayside stations, and the long lines to connect the P. B. X. boards. Calls can be handled between any two persons anywhere on the railroad. In numerous instances, train time is saved and important decisions are reached promptly, often saving materials and labor. Of importance is the fact that the new telephone facilities have sufficient capacity to handle all calls promptly.

The new communications facilities were planned and installed by railroad forces under the jurisdiction of N. W. Menzies, superintendent of telegraph, and under the direct supervision of Charles Freeman, telephone and telegraph engineer, and J. C. Cotter, system wire chief. The printing telegraph equipment was furnished by the Teletype Corporation, Chicago, the carrier apparatus by the F. W. Lynch Company, San Francisco, the duplex apparatus by the Electronic Communications Equipment Company, Chicago, and the relays in the switching center by the Automatic Electric Company, Chicago, and Western Electric Company, Chicago.

GENERAL NEWS

Equitable Life to Buy And Lease Freight Cars

Pullman-Standard may participate in program

A plan to purchase new freight cars from manufacturers and lease them to domestic railroads has been developed by the Equitable Life Assurance Society, Thomas I. Parkinson, president, announced this week. The plan, which reportedly has been supported by the Pullman-Standard Car Manufacturing Company, is designed to enable railroads to secure immediately, without down payment, as much new freight equipment as they need. The result, Mr. Parkinson said, will be speedier, better freight service at lower operating costs. At the same time, employment among car manufacturers and affiliated industries will be maintained at a high level and the country's economy will benefit generally from this new outlet for life insurance investment funds.

In traditional practice, the announcement said, railroads have been required to make a minimum 20 per cent cash down payment on purchases of new freight cars. As a result, orders for badly needed new equipment often have been withheld whenever it appeared that general business, and railroad earnings in particular, might be on a downward trend. This occurred in 1949 when, because of a decline in railroad gross, the backlog of orders for new freight cars almost disappeared.

Over 30 per cent of freight cars now in use are more than 25 years old and substantially over one-half are more than 20 years old, Mr. Parkinson said. By the end of the twentieth year of service most railroads find it necessary to rebuild their freight cars. Yet, after such rebuilding, the cars still have such 20-year-old disadvantages as limitation of size and excess weight. Many engineers contend it would be more economical for railroads to scrap 20-year-old cars than rebuild them. However, to get the car fleet even close to the ideal, where no cars would be over 20 years old, would take far more money than railroads ever will have available—probably between $5 billion and $5½ billion. By comparison with these requirements, freight car purchases in 1948 reached a 20-year high of only $417,000,000.

Details of the Plan

Under Equitable's purchase and lease basis of financing, railroads would not be required to pay a 20 per cent cash down payment. As a result, their equipment purchases would not be limited by immediate working capital problems. The Equitable plan is based on two documents: A purchase agreement between Equitable and the car manufacturer, and a lease of the cars between Equitable and the railroad. Under the purchase agreement with the manufacturer, Equitable makes a down payment in cash and agrees to pay the balance in equal instalments over five years, so long as rentals are received for the cars from the railroad. Interest is paid during the five years on unpaid balances owed the manufacturer.

According to terms of the agreement with the railroad, Equitable leases the cars to the railroad for an initial term of 15 years, giving the railroad an option of returning the cars to Equitable at the end of such term or of continuing to lease any or all of them for an additional term of up to 10 years at 20 cents a day.

Pullman's Participation

A spokesman for Pullman-Standard is reported to have said his firm subscribed in principle to the Equitable plan and would seriously consider participation with Equitable in the financing. Indicative of the part Pullman-Standard and its parent, Pullman, Inc., would play in the plan is the following excerpt from the Pullman, Inc., annual report for 1949:

"Railroad purchases of freight car equipment have followed no regular pattern and have created over the years a continuing condition of 'feast or famine' in the carbuilding industry. The Pullman-Standard organization, in its search for ways and means of reducing these fluctuations, has developed a plan which it is believed would enable the railroads to obtain such equipment without the financial strain that has been one of the causes of spasmodic buying in the past. An important feature of this plan is that the railroads will obtain the use of the cars on a daily rental basis without the necessity for making the substantial down payments that are customary when cars are purchased

"The practice of maintaining older freight cars in service through the device of increasingly heavy repairs is being seriously questioned by many railroads. If the conclusions as they are reached by the railroads on this problem support the belief long held by members of this organization that greater economy and other advantages would result from more rapid replacement of freight equipment, the leasing plan will offer the railroads an attractive method of modernizing their car fleets.

"Many railroads have indicated real interest in this new method of acquiring equipment, and it is hoped that before long actual leases of new cars will materialize. The corporation intends to participate in the financing of new equipment built under this leasing plan, and if the plan develops as anticipated, substantial sums will be employed for this purpose."

The Equitable plan is a move in the right direction and might step up freight-car buying by railroads, a spokesman for the Pressed Steel Car Company told *Railway Age* in New York. However, he added, the plan may, to a certain extent, involve substitution of carbuilders' capital for railroad capital.

4 Years Is Minimum For Job Protection

Supreme Court so rules; sends New Orleans case back to I.C.C.

In fixing a four-year period of protection for railroad employees adversely affected by consolidation and coordination projects, Congress prescribed a "minimum protection," but did not confine the Interstate Commerce Commission "to the four-year protective period as a statutory maximum." The Supreme Court has so ruled in a 4-to-3 decision in the case involving the appeal of the Railway Labor Executives' Association from the commission's findings on the employee-protection phase of consolidations and coordinations which will result from the proposed new union passenger terminal at New Orleans, La.

Issues Involved

The labor-protection provisions that were in issue are in the Interstate Commerce Act's section 5(2)(f). The section's opening sentence stipulates that, in approving any merger, consolidation, or coordination proposal, the commission shall require "a fair and equitable arrangement" for protection of employees affected. The four-year period of protection is provided for in the next sentence, which also says that such period will begin with the effective date of the commission's order approving the transaction involved.

The commission's report approving the New Orleans project was issued two years ago (see *Railway Age* of April 17, 1948, page 67). May 17, 1948, was the effective date of the accompanying order; and the commission prescribed conditions to protect employees for a period of four years from that date, or

The new General American-Evans box car for lease to the railroads (described in *Railway Age* of March 18, page 84) will look much like this inside, except that the floor will be of nailable steel. The car is designed especially for quick loading and unloading, elimination of ordinary dunnage for securing loads and reduction of loss and damage in transit

until May 17, 1952. R.L.E.A.'s appeal to the courts, instituted after the association sought unsuccessfully to have the commission reconsider the matter, was based on a contention that many of the affected employees would receive no protection, i.e., the four-year period prescribed by the commission would have run out before they lost their jobs, since the commission had allowed New Orleans railroads and that city until December 31, 1954, to complete the project.

The commission's argument was that it was without power to provide more protection, because the four-year provision in the second sentence of section 5(2)(f) "sets an inflexible standard for the fair and equitable arrangement required by the first sentence." The commission was upheld by a special three-judge court; and it was from that determination that R.L.E.A. appealed to the Supreme Court. The Department of Justice supported the commission in the lower court, but then did an about-face, filing with the Supreme Court a brief supporting R.L.E.A.'s position.

Sentences "Separable"

The Supreme Court's decision was announced in an opinion by Justice Burton. Tracing the legislative history of section 5(2)(f), which was added by the Transportation Act of 1940, the court found that the first and second sentences were "separable," and thus the four-year provision was not a limitation on the first sentence's general requirement calling for "a fair and equitable arrangement" for protection of employees. In reaching this conclusion, the court noted that the section's first sentence was in the original Senate and House bills which evolved into the Transportation Act of 1940; but the four-year provision was added later as a modified version of the so-called Harrington amendment, the original version of which would have prohibited any consolidation or coordination that would result in unemployment or the "impairment of existing employment rights."

Amendment Made Workable

"The second sentence [the court said] thus gave a limited scope to the Harrington amendment and made it workable by putting a time limit on its otherwise prohibitory effect. There was no comparable need for such a restriction on the first sentence. We find, therefore, that the time limit in the second sentence now applies to it and to it alone. As thus limited, that sentence adds a new guaranty of protection for the interests of employees, without restricting the commission's power to require greater protection as part of a fair and equitable arrangement. That serves the purpose of the sentence to increase, rather than to decrease, the protective effect of the paragraph."

The court then proceeded to remand the case (No. 337, Railway Labor Executives' Association v. United States, I.C.C., City of New Orleans, et al.) to the district court with instructions that it be remanded to the commission for further proceedings "consistent with this opinion."

The three dissenters were Justices Jackson, Frankfurter and Reed, while Chief Justic Vinson and Justice Douglas took no part in consideration or decision of the case. Justice Jackson noted that his dissent was "upon the ground that resort to legislative history to vary the terms of the statute is not justified in this case." Justices Frankfurter and Reed joined in a dissenting expression written by the former. It was largely a quotation from the argument made by the Department of Justice when it was supporting the commission in the lower court. As to the arguments in favor of the commission's position, Mr. Frankfurter said he could not do better than "state them in the government's own language."

Gass Sees Heavy Lake Ore and Coal Traffic

His latest review discusses results of coal miners' strike

Heavy movement of both coal and iron ore for the coming navigable season on the Great Lakes was predicted by Chairman Arthur H. Gass of the Car Service Division, Association of American Railroads, in his latest review of the "National Transportation Situation." Mr. Gass said depleted stocks of coal point up the necessity for a heavy lake coal movement, and that the current program calls for movement of approximately 50 million tons, compared with 37 million tons in 1949. He said ore shipments scheduled for lake movement will probably amount to 80 million tons this season.

Resumption of full production at the mines, Mr. Gass said, has resulted in some shortages in open top cars, but he indicated this shortage should become less acute as the normal turn-around cycle of these cars is reestablished. He predicted "continued heavy loading at the mines for a considerable period," and said coal production during the remainder of 1950, on the basis of present industrial trends and outlook, should be about 500,000,000 tons of bituminous.

Both revenue coal loadings and coal moving for export were heavily reduced during recent months, according to the survey. Revenue coal loadings for the first 10 weeks of 1950 were 37.8 per cent below the comparable period in 1949 and 49.3 per cent below the same period in 1948. For the eight months ending February 28, export coal moving overseas was 2,194,297 gross tons, compared with 11,515,358 gross tons in the same period of 1948-49. Mr. Gass predicted export coal movements would not exceed 200,000 tons a month, at least in the immediate future.

Equipment Situation

Other sections in Mr. Gass' review were devoted to the equipment situation and car supply. Equipment orders during the past two months have been placed in large volume, he said, bringing totals of both freight cars and locomotives on order to levels "considerably higher than have prevailed for the past six months." The 345 locomotives or-

dered in January set a new monthly record.

During January and February, Class I roads retired 12,631 freight cars of all types and 755 steam locomotives. Meanwhile, Mr. Gass noted, installations of new equipment were light, amounting to 4,617 freight cars and 286 locomotives.

As of March 1, there were 144,308 freight cars awaiting repairs, slightly more than the January 1 figure of 140,946. Mr. Gass said the present figure is about 2,000 below the peak reached on February 1, and added that with coal mining resumed the number of bad order cars is expected to be further reduced. He went on to say that this reduction should "offset the further loss in car ownership which will occur . . . until the railroads receive delivery of new cars in numbers exceeding retirements."

Class I roads reported on March 1 a serviceable ownership in freight cars of 1,680,688.

Car Supply

With respect to car supply, the C.S.D. chairman said there have been rather wide-spread shortages of hoppers recently, but indicated this situation was only temporary with resumption of coal loadings. He classified the gondola supply as "tight," and said demands for both plain and special-type flats has been heavy. Covered hopper loadings are up nearly 23 per cent over the comparable two-month period in 1949.

The box car situation has "tightened considerably" since January, Mr. Gass said, and shortages of better class cars are developing. This shortage is another result of the recent coal crisis, he explained. The railroads were forced to retard movement of empty equipment to handle the maximum amount of essential freight, since they were at the same time curtailing coal-burning locomotive service. Mr. Gass said movement of empties is expected to return rapidly to normal as the roads resume usual operations.

Harvest Season Approaches

As the new harvest season approaches, however, gradually increasing demands for box cars are anticipated, he said, adding that there is little doubt the available supply "will be taxed to take care of peak requirements." In connection with the grain harvest, Mr. Gass said that while it is still too early to predict the size of the rail transportation job accurately, it is certain that a tremendous volume of last year's crop, now held by the government, would have to be moved to make room for the new crop. This movement may run as high as 270,000 carloads for rail movement, either in advance of the 1950 harvest or in conjunction with it.

Turn-around time for February averaged 19.98 days for all cars, an increase over previous years partly because the average included the large number of idle coal cars. Average detention of freight cars in February over free time of 48 hours was 20.50 per cent, as compared with 19.22 per cent in January, and 16.05 per cent in February, 1949.

Pressed Steel Completing Two New Types of Freight Cars

Pressed Steel Car Company, in conjunction with another group in the engineering and design field, "is well on the way toward completing and testing two wholly new types of freight cars," according to the former's annual report for 1949.

The cars have not yet been exhibited, John I. Snyder, Jr., Pressed Steel Car president, said in the report. "All of our preliminary tests so far have shown encouraging results," he added. "In general, we believe that these cars, in comparison with conventional cars, will (1) be stronger, (2) be lighter by several tons, (3) have greater cubic capacity while retaining standard clearances, (4) be cheaper to maintain, (5) be operated with less lading damage, (6) be substantially less costly to load and unload, (7) be more impervious to weather, (8) be cleaner and easier to clean, (9) be attractive to look at from the public's point of view, and (10) be cheaper, in production, to buy or rent."

Switchmen Balk At Board's Request For Time Extension

The presidential emergency board which has the dual assignment of hearing the separate proposals of the Order of Railway Conductors and the Brotherhood of Railroad Trainmen, on one hand, and the Switchmen's Union of North America on the other, for a 40-hr. week for yardmen, got a "no" from the Switchmen on March 28 to its proposal for an extension of time in which to hear and report on that organization's demands. The board has previously, on March 23, received the mutual approval of the carriers and the O.R.C. and B.R.T. for an extension until June 1 to complete hearings on their respective proposals.

A. J. Glover, president of the Switchmen's Union, in refusing either to join in the proceedings of the other two organizations, or to wait until their case is completed, stated that his union did not wish to suffer the delay incident to requests for road changes which are involved only in the O.R.C. and B.R.T. proposals. Some observers felt, however, that the S.U.N.A., which did not serve its demands on the carriers until September 20, 1949—six months after the rival organizations had taken such action—was trying to force favorable concessions for its members prior to the board's ruling, not due until June 1, on the trainmen and conductors' proposals. The Switchmen's Union represents only about five per cent of the yard employees involved in the 40-hr. week proposals.

Judge M. J. O'Malley, chairman of the fact-finding board, stated that, in light of the switchmen's refusal to agree to an extension, the board would have only until April 19 "to at least hypothetically make a report" to the president, after which "the organization would proceed under what they concede to be their coercive rights under the Railway Labor Act," a statement which counsel for the switchmen affirmed.

Hearings on the demands of the O.R.C. and B.R.T., meanwhile, are continuing at Chicago from 9 a.m. to 1.30 p.m. Monday through Friday, with the carriers, currently, presenting their side of the case.

Will Hold Hearing on Proposal To Probe M. P. Reorganization

The Senate committee on interstate and foreign commerce will begin public hearings April 13 on the resolution that proposes to have the Senate direct the committee to investigate that phase of the Missouri Pacific reorganization plan which denies participation to common stockholders of the old company and provides for only "limited participation" by the old preferred stockholders. The resolution. S.Res. 241, is sponsored by 20 senators (see *Railway Age* of March 24, page 69).

Failure To Heed Signals Caused Long Island Wreck

"Failure to operate the eastbound train in accordance with signal indications" caused the February 17 collision between two Long Island electric trains near Rockville Centre, N. Y., the Interstate Commerce Commission has found in a report on its investigation of the accident. The collision, which occurred on temporary gantlet track, resulted in the death of 29 passengers and 2 railroad employees not on duty, and in the injury of 124 passengers, 18 employees not on duty and 16 train-service employees.

The commission's report was by Commissioner Patterson, and its finding as to the cause of the accident confirmed that made at the time by the railroad (see *Railway Age* of February 25, page 56). The report pointed out that the road has since established a speed limit of 15 m.p.h. (it was formerly 30 m.p.h.) on trains moving over the gantlet track. Also, it has rearranged control circuits of the governing signals so that, when the route is lined for movement in one direction, a "stop" aspect is displayed by the distant signal as well as by the home signal, governing movements in the opposite direction.

In addition, a manually operated train-stop device of the tripper type has been installed at each of the distant signals. When the route is lined for one direction, the tripper at the distant signal governing opposing movements is placed in "tripping" position, i.e., in position to cause an emergency application of the train brakes when a multiple-unit car passes it.

The eastbound train's motorman, Jacob

Kiefer, offered no evidence in the commission investigation. He "declined," through his attorney, "to make a statement regarding the accident," he said. Mr. Kiefer has been indicted for second degree manslaughter by a Nassau County grand jury.

As noted above, the gantlet or overlapping tracks comprise a temporary installation. It was placed in service in April, 1949, for use while the regular double tracks—part of the L.I. main line from New York to Montauk—are being elevated to eliminate 10 grade crossings in Rockville Centre. Gantlet construction was required because there is insufficient space for temporary double-track construction between the new elevated structure and buildings adjacent to the right-of-way. The gantlet section is 1,547 ft. in length, extending between points which are 524 ft. west and 2,071 ft. west of the Rockville Centre station.

It is protected by an interlocking, manually controlled from Center tower at Rockville Centre, and position-light signals which are repeated in the cabs of trains operating in the territory. The cab signals are of the type which sound a whistle warning when the train passes a "stop" signal. Also, there was the 30 m.p.h. slow order, which has since been supplanted by the 15 m.p.h. order. The wayside signals governing eastbound trains are automatic signal S176 and semi-automatic signal O2R, located respectively 4,042 ft. and 171 ft. west of the point of the accident. Westbound movements are governed by like signals—T and P O21, located, respectively, 5,759 ft. and 1,976 ft. east of the point of accident.

"Opposing signals cannot simultaneously display aspects to proceed," the commission's report said. At the time of the accident, the route through the gantlet track was lined for the westbound train, No. 175, which consisted of 12 multiple-unit cars of steel construction. Thus signals S176 and O2R, respectively, displayed aspects of "approach" and "stop" to the eastbound train, No. 192, which also consisted of 12 multiple-unit cars of steel construction.

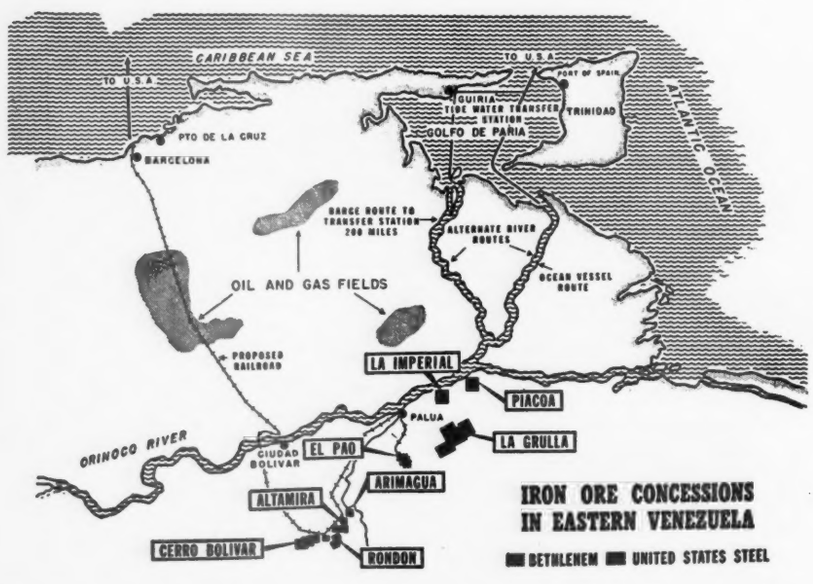
This train passed those signals, and its collision with No. 175 occurred when the latter was about to emerge from the gantlet track. The point of collision was 11 ft. east of the frog at the west end of the gantlet and 2,060 ft. west of the Rockville Centre station.

The first car and the front truck of the second car of No. 175 were derailed to the north and this train stopped with the west end of the first car 49 ft. west of the point of the accident. The first car stopped against an embankment north of the track and leaned to the right at an angle of 30 degrees. The left side of the front vestibule was "crushed," and the left side of the car was "demolished." The second car remained upright but was "badly damaged." Eight of the other 10 cars were "somewhat damaged." As to No. 192, the front truck of its first car was derailed to the south, and this train stopped with the west end of the first car about 50 ft. east of the point of collision. The first car remained upright, but its front vestibule was "crushed," and its left side was "demolished." Eight of the remaining 11 cars were "somewhat damaged." The estimated speed of both trains was 25 m.p.h. The weather was "clear" at the time of the accident which occurred at 10:35 p.m.

The commission's investigation disclosed that the motorman of No. 175 observed No. 192's headlight as his train approached the west end of the gantlet. He soon realized that No. 192 had passed signal O2R, and immediately initiated an emergency-brake application; but the collision occurred before the application became effective. The commission received no evidence indicating that the trains' brakes, or the interlocking and signaling facilities, had failed to function properly.

When the accident occurred, the conductor of No. 192 was seated in the rear of the first car. One of the L.I.'s operating rules requires the trainman nearest the operating compartment to go to the engineman "immediately," if the cab-signal warning whistle sounds more than 6 seconds; but the conductor said that, from his position, he could not hear the sound of the whistle while the train was in motion. He also said that the motorman was alone in the control compartment. The motorman had been employed for more than 26 years as a motorman and engineer. At the time of the accident, he had been on duty approximately four hours. The members of its crew said that No. 192 was operated between New York and the point of the accident "in the usual manner."

The commission said the L.I. expects that the permanent tracks at Rockville Centre will be placed in service about May 10, when operation over the gantlet will be discontinued and double-track operation resumed.



The United States Steel Corporation recently organized a new subsidiary, the Orinoco Mining Company, to undertake development of iron ore properties at Cerro Bolivar in eastern Venezuela. Now under discussion are methods by which ore will be brought from the interior to ocean shipping points. Decision is expected before mid-1950 on the advisability of constructing a 274-mi. railroad from Cerro Bolivar to the deep-water port of Barcelona (see map), or a 91-mi. railroad from the mine to Palua. The longer railroad, it is reported, would cost approximately $113,000,000, and the shorter about $51,000,000

More Time For Presentations On New 28300 Rate Scale

Responding to a request of the railroads, the Interstate Commerce Commission has further postponed, from March 31 until June 30, the deadline date for the filing of presentations on the proposed substitute for the basic scale of class rates which its report in the No. 28300 Class Rate Investigation prescribed for application in connection with the uniform classification that the railroads are now preparing pursuant to the commission's findings in the No. 28310 investigation of that matter (see *Railway Age* of December 3, 1949, page 57).

The June 30 deadline applies with respect to the filing of verified statements embodying the parties' "evidence in chief," and the new schedule fixes August 1 as the date by which rebuttal evidence must be filed. The railroads requested the postponement in order that they might have time to complete studies of the effect of the proposed new scale on their revenues.

The western roads advised the commission that it will be their purpose to

show that they are in no position to assume a reduction in revenues which would result from application of the new scale. Meanwhile, they have prepared another scale which, they are "convinced," will preserve their revenues and "will not do violence to the end that the commission seeks to achieve."

The eastern roads are making two studies—a rate analysis, and a revenue study. The southern roads have advised the commission that they "find themselves in the position of being unable to determine finally their position in this proceeding, pending definite consideration and conclusions as may be reached by the eastern and western railroads."

N. & W. Receives All 30 Steam Switchers from C. & O.

All 30 steam switching locomotives of the 0-8-0 type purchased by the Norfolk & Western from the Chesapeake & Ohio have been delivered, a spokesman for the C. & O. said this week. The locomotives cost approximately $50,000 each, not $20,000, as reported in the *Railway Age* of March 18.

Eight Senators Sponsor Bill For Union Shop, Dues Check-Off

Eight senators have joined in sponsoring a bill to amend the Railway Labor Act to authorize inclusion in labor-management agreements of provisions for a "union shop" and "check-off" of union dues. The bill, S.3295, is identical to H.R. 7789, previously introduced in the House by Representative Crosser, Democrat of Ohio (see *Railway Age* of March 25, page 68).

The Senate bill was introduced by Senator Murray, Democrat of Montana, for himself and Senators Thomas of Utah, Pepper of Florida, Hill of Alabama, Neely of West Virginia, Humphrey of Minnesota, Lehman of New York, Democrats, and Morse of Oregon, Republican.

Seven Provinces Appeal Canadian Rate Increases

Seven of the 10 Canadian provinces have appealed at Ottawa, Ont., against the last two freight-rate increases awarded to Canadian railways by the Board of Transport Commissioners, which together raised rates 16 per cent above the levels of last September. The provinces also asked the federal Cabinet to hold up the latest increase of 7.4 per cent, granted March 1, and included in the overall 16 per cent increase.

The 16 per cent increase against which the provinces appealed consists of an 8 per cent "interim" award of September 20, 1949, and the March 1 award of 7.4 per cent, both granted in response to an application originally filed by the railroads in 1948 for a 20 per cent increase. Meanwhile, the railroads have asked for an additional 3.4 per cent rate increase, which, if allowed, would give them the full 20 per cent requested in 1948. (See *Railway Age* of March 18, page 83.)

The Socialist leader in the House of Commons at Ottawa, M. J. Coldwell, also has attacked the rate increases on the ground that they will work injury to western farm interests.

Freight Car Loadings

Loadings of revenue freight in the week ended March 25 totaled 717,233 cars, the Association of American Railroads announced on March 30. This was a drop of 8,337 cars, or 1.1 per cent, below the previous week, an increase of 120,904 cars, or 20.3 per cent, above the corresponding week last year, and an increase of 53,570 cars, or 8.1 per cent, above the equivalent 1948 week.

Loadings of revenue freight for the week ended March 18 totaled 725,570 cars, and the summary for that week as compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, March 18

District	1950	1949	1948
Eastern	136,181	114,502	144,855
Allegheny	148,340	124,096	156,600
Pocahontas	68,233	20,012	25,926
Southern	128,814	111,005	123,610
Northwestern	75,258	76,188	79,907
Central Western	110,810	105,534	105,528
Southwestern	57,934	56,585	63,167
Total Western Districts	244,002	238,307	248,602
Total All Roads.	725,570	607,922	699,593
Commodities:			
Grain and grain products	42,288	47,093	36,133
Livestock	7,811	8,597	7,891
Coal	191,234	45,850	80,008
Coke	12,365	12,252	12,768
Forest products.	37,786	36,271	47,818
Ore	11,912	13,158	15,306
Merchandise l.c.l.	84,834	94,754	115,889
Miscellaneous	337,340	349,947	383,780
March 18	725,570	607,922	699,593
March 11	707,962	709,326	796,486
March 4	574,395	705,552	791,984
February 25	546,791	688,128	790,910
February 18	560,116	697,335	804,937
Cumulative total 11 weeks	6,689,529	7,634,359	8,501,318

In Canada.—Carloadings for the week ended March 18 totaled 74,311 cars, compared with 71,127 cars for the previous week, and 72,991 cars, for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
March 18, 1950	74,311	33,060
March 19, 1949	72,991	31,251
Cumulative totals for Canada:		
March 18, 1950	745,831	314,282
March 19, 1949	797,533	353,196

Talk on Taxes Features Allegheny Board Meeting

"Hidden taxes," and other taxes averaging $300 a year per person and over $1000 per year per family, constitute "a serious threat to our standard of living," Robert C. Downie, president of the Peoples First National Bank & Trust Co. of Pittsburgh, Pa., told more than 300 members of the Allegheny Regional Advisory Board who assembled at Pittsburgh on March 23 for the board's 62nd regular meeting.

Pointing out that the tax burden has increased 819 per cent since 1929, while population has increased only 22 per cent, and that the average citizen works 61 days a year to pay the cost of federal, state and local government, Mr. Downie urged support for the report of the Hoover Commission as a means of obtaining "economy in government."

W. E. Callahan, manager of the Open Top Section, Car Service Division, Association of American Railroads, made an encouraging report on future business prospects, with emphasis on the "stabilizing and stimulating effect" of settlement of the coal strike. The railroads, Mr. Callahan added, "are ready for substantial increase in tonnage and will cooperate fully with the shipping public." He also stated that approximately 27,500 new freight cars were on order as of March 1; that a considerable number have been ordered since that date, and that special car conditioning programs are effective on all railroads to restore to active service cars awaiting repairs.

W. E. Fowler, of Youngstown, Ohio, general traffic manager of the Youngstown Sheet & Tube Co., was elected general chairman of the board, to succeed Clem W. Gottschalk, general traffic manager of the Jones & Laughlin Steel Corp. Other newly elected officers include W. W. Larkin, traffic manager, Continental Foundry & Machine Co., Wheeling, W. Va., vice-general chairman; J. F. Davis, traffic manager, Babcock & Wilcox Tube Co., Beaver Falls, Pa., general secretary; J. N. Lind, assistant general traffic manager, National Supply Company, Pittsburgh, chairman, executive committee; and P. W. Hartsock, assistant traffic manager, Warner Company, Bellefonte, Pa., vice-chairman, executive committee.

Southern Rate-Pact Hearing Will Be in Washington

The April 19 hearing in connection with the Interstate Commerce Commission's consideration of the Bulwinkle-Act agreement filed by southern railroads will be held at Washington, D. C.; not, as reported erroneously in the *Railway Age* of March 25, page 68, at New Orleans, La.

C. & O. and Pullman-Standard Working Jointly on "Train X"

"Development work on the new, lightweight Train X [has] reached the stage where it is now being carried on jointly with Pullman-Standard Car Manufacturing Company," according to the Chesapeake & Ohio's annual report for 1949. The low-centered "Train X" passenger equipment, which will be less expensive to build than standard passenger cars, a spokesman for the C. & O. said, is expected to help the railroads solve the problem of passenger service operated at large deficits. A summary of

The Indianapolis Union Railway starts its second century on April 1. The present station building was built in 1888, and has since undergone extensive modernization of interior and track layout

developments to be embodied in the new equipment appeared in the *Railway Age* of March 27, 1948, page 62.

Indianapolis Union 100 Years Old

April 1 marks the one-hundredth anniversary of the authorization by the Indianapolis, Ind., common council of what is believed to have been the first union railroad trackage in America—that of the present Indianapolis Union. Actual construction of the Union Track Railway, I.U.'s predecessor, was begun June, 1850, to establish "a joint rail road track, connecting the Madison & Indianapolis, the Terre Haute & Richmond, the Peru & Indianapolis, and the Indianapolis & Bellefontaine Rail Roads . . . and to locate and establish on said joint track a joint passenger depot."

The Indianapolis union station, said to be America's first union passenger "depot," (as distinct from joint use of track owned by a line-haul carrier, as, for example, Grand Central Terminal, New York) was opened on September 28, 1853. The Indianapolis Morning Journal, in a contemporary comment, suggested that the building be called the "Grand Railroad Rendezvous." "Depot," the paper pointed out, "is a French word, signifying a town or place where goods are lodged for safekeeping or for reshipment . . . It is rather depreciating humanity to speak of this building as a place where so many men, women and children are *unloaded* out of one car and *loaded* into another, or *hauled off* to the hotels."

The original structure was replaced in September, 1888, by a new facility costing more than $1 million. The terminal has since been modernized by extensive elevation work, the bridging of 13 streets, and betterment of facilities for improved handling of rail traffic. The company is now replacing its coal-burning steam locomotives, which service the company's 74 mi. of track, with Diesel power.

The present Indianapolis Union, valued at $11,139,284, is owned 60 per cent by the Pennsylvania and 40 per cent by the New York Central.

Roads Serving South Atlantic And Gulf Ports Propose Pact

Railroads serving ports on the south Atlantic and Gulf coasts between Morehead City, N. C., and Corpus Christi, Tex., have filed with the Interstate Commerce Commission an application which seeks approval of a Bulwinkle Act agreement. The agreement would relate to rates, classifications, divisions, allowances, charges, and rules and regulations for freight traffic, except certain commodities, moving through the ports to or from parts of Western Traffic Association territory, Southern Freight Association territory, Eastern territory, and Illinois Freight Association territory. The application, filed under the Interstate Commerce Act's section 5a (Reed-Bulwinkle Act), has been docketed as Section 5a Application No. 19.

The proposed agreement, the application said, would continue in effect, with minor changes, the existing rate conference between carriers serving the southern ports. The organization would be known as the Southern Ports Foreign Freight Committee. Limited in jurisdiction to traffic matters, the group would function through a committee of the whole known as the General Committee on which each member road would be represented with one vote. Among other things, the committee would "insure reasonable freight rates, free of discrimination to shippers, carriers and localities," preserve proper rate relationships, and "safeguard the interest of shippers and receivers of foreign freight moving by rail via these ports." Among commodities listed as outside the committee's jurisdiction were coal, coke, cotton, cotton linters, cottonseed products, grain and grain products, coffee, bananas, and cocoanuts.

Provisions of the proposed agreement include the usual ones relating to organization, voting rights of members, how the agreement may be amended, and reserving the right of independent action to each member road. Membership in the group would be open to any rail carrier "having substantial mileage" within the involved territory, and a carrier could withdraw from membership on 60-days' notice. Other provisions state that "interested parties" may submit proposals to the committee, and that such parties may request public hearing for their proposals.

The I.C.C. notice announcing receipt of the application said any person desiring a hearing should request it in writing within 20 days from the notice's date (March 20). "Otherwise," the notice said, "the commission, in its discretion, may proceed to investigate and determine the matters involved in such application without further or formal hearing."

Additional General News and Organizations News appear on pages 81 through 84.

CONSTRUCTION

Canadian National.—See "Equipment and Supplies" column.

Chicago, Indianapolis & Louisville.—This road has awarded a contract to Intrusion-Prepakt, Inc., Chicago, covering work on seven bridges over Clear creek on the main line to Louisville, Ky., at an estimated cost of $41,000, and on three bridges at Cary, Ind., at a cost of $35,000. The work will include underpinning and repairing abutments, piers and

bridge seats. Work scheduled to be done by company forces includes construction of new I-beam spans with ballast deck on new abutments at two different locations, at a cost of $25,000, and installation of approximately 20 corrugated iron pipe culverts, replacing old stone-box culverts at various locations. The road also proposes to relay 14 mi. of new 115-lb. rail at various points on its main line between Monon, Ind., and New Albany, revise yard facilities at McDoel and Indianapolis, and install new light towers at South Hammond.

Chicago, Milwaukee, St. Paul & Pacific.—This road has awarded a contract to Ragnar Benson, Inc., for construction of a 3-stall Diesel servicing building at Bensenville, Ill. The estimated cost of the building is $893,000, of which $695,000 represents work to be done by Benson, and $198,000 represents associated improvements to be done by company forces.

Denver & Rio Grande Western.—The following projects, to be undertaken by company forces, have been authorized: Installation of 133-lb. and 115-lb. rail on 18.57 track mi. at a cost of $508,400; rearrangement of Belt Line in Denver, Colo., $205,400; rearrangement of yard at Pueblo, Colo., $169,300; change in line of 1.2 mi. of main line near Thompson, Utah, $32,738; and rearrangement of tracks at Helper, Utah, $42,600. In addition, the company plans to spend $120,700 on its bridge and culvert program, and $125,000 on its tunnel program.

Northern Pacific.—This company has announced a $200,000 improvement program at Dilworth, Minn., for servicing steam and Diesel locomotives recently placed in service between Dilworth and Glendive. A present 80-ft. turntable will be replaced by a new 125-ft. table, and four roundhouse stalls will be extended 45 ft. to a length of 148 ft. The work is scheduled to start late in April.

Southern.—This road has awarded contracts at the indicated estimated costs to Ralph E. Mills Company, Frankfort, Ky., for an underpass for engine track which is part of the rebuilding and modernizing of John Sevier yard, Knoxville, Tenn. ($64,500); and to Jenkins Brothers Construction Company, Raleigh, N. C., for clearing, grading and drainage work involved in joint construction with the Atlantic Coast Line of an industrial switching lead and two storage tracks to serve the Carolina Power & Light Co. plant at Goldsboro, N. C. ($30,500). Details of the modernizing of John Sevier yard appeared in *Railway Age* of January 14, page 47, and a report on the Coast Line's portion of the joint work at Goldsboro was published in the issue of February 18, page 72. The Southern's total share of the latter project will cost approximately $259,275.

The following projects, to be undertaken by the Southern's own forces, have been authorized: Changes in yard tracks at Asheville, N. C. ($226,500); construction of additional servicing tracks with platforms and refueling points for Diesel-electric locomotives in Inman Yard, Atlanta, Ga. ($52,000), and construction of tracks for interchange of traffic with the Illinois Central at Laurel, Miss. ($20,400).

EQUIPMENT AND SUPPLIES

Canadian National to Spend $36,698,430 on New Equipment

New equipment to be bought by the Canadian National this year will include 67 Diesel-electric locomotives, 57 baggage cars and 50 sleeping cars, according to budget figures submitted this week to the House of Commons at Ottawa, Ont. The total cost of new equipment to be purchased by the road was estimated at $36,698,430. Additions and betterments will cost $30,872,059, not including $230,000 needed to complete work on the Barraute branch in northeastern Quebec.

Domestic Equipment Orders Reported in March

Domestic orders for 115 Diesel-electric locomotive units, 6,908 freight-train cars and 3 rail Diesel passenger cars were reported in *Railway Age* last month. Estimated total cost of the locomotive units is $18,520,000, of the freight cars $34,540,000, and of the rail Diesel cars $415,000. An accompanying table lists the orders in detail.

During the first three months of 1950, *Railway Age* has reported domestic orders for 591 Diesel-electric locomotive units costing about $82,761,000, 21,583 freight-train cars costing approximately $113,565,000, and six rail Diesel passenger cars costing about $800,300.

FREIGHT CARS

The **Louisville & Nashville** has ordered 500 50-ton box cars from the Pullman-Standard Car Manufacturing Company. The cars, to cost $2,500,000, are to be delivered by July 1.

The **Lehigh Valley** has ordered 500 box cars from the Pullman-Standard Car Manufacturing Company and 1,000 box cars from the Bethlehem Steel Company.

LOCOMOTIVES

Erie Orders 68 Diesel Units Costing $10,500,000

The Erie has ordered 68 Diesel-electric locomotive units costing about $10,500,000. American Locomotive-General Electric Companies will build two 4-unit 6,000-hp. freight and 14 1,500-hp. road-switching locomotives; Electro-Motive Division of General Motors Corporation, 26 1,500-hp. road-switchers and five 1,000-hp. yard-switchers; Baldwin Locomotive Works, nine 1,500-hp. road-switchers; and Lima-Hamilton Corporation, six 1,000-hp. yard-switchers.

T. & P. to Buy 23 Diesel Units Costing $3,500,000

The Texas & Pacific board of directors has authorized purchase of 23 Diesel-electric locomotive units at an approximate cost of $3,500,000. Included in the authorization were two 4,500-hp.,

Locomotives

Date	Purchaser	No.	Type	Builder
March 11	Erie	2	1,500-hp. rd.-sw.	Electro-Motive
		1	1,000-hp. switch.	Electro-Motive
		2	1,500-hp. rd.-sw.	American-G.E.
		2	1,500-hp. rd.-sw.	Baldwin
March 25	S. P.	22	4-unit 6,000-hp. frt.	Electro-Motive
		2	4-unit 6,000-hp. pass.	American-G.E.
		12	1,500-hp. freight	Baldwin

Freight Cars

March 4	D. T. & I.	250	50-ton Box	Greenville
March 4	G. M. & O.	100	70-ton Cov. Hopper	American Car & Fdy.
March 4	S. A. L.	300	70-ton Phosphate	Pullman-Standard
March 11	C. B. & Q	1,900	50-ton Box	R. R. Shops
		600	70-ton Triple Hopper	R. R. Shops
		200	70-ton Hopper	R. R. Shops
March 11	L. V.	100	70-ton Cov. Hopper	Bethlehem
		50	70-ton Flat	R. R. Shops
March 11	M. St. P. & S. Ste. M.	75	70-ton Cov. Hopper	American Car & Fdy.
March 11	M.-K.-T.	500	50-ton Box	American Car & Fdy.
March 11	M. P.	100	70-ton Hopper	R. R. Shops
March 11	N. & W.	1,000	70-ton Hopper	R. R. Shops
March 11	N. P.	500	50-ton Box	R. R. Shops
		50	Caboose	R. R. Shops
March 11	Western Fruit Exp.	50	Refrigerator	Co. Shops
March 11	Wilson Car Lines	100	40-ton Refrigerator	Co. Shops
March 25	M. P.	500	50-ton Box	R. R. Shops
		510	70-ton Hopper	R. R. Shops
March 25	Spokane Int'l	23	70-ton Cov. Hopper	American Car & Fdy.

Passenger Cars

March 11	C. & N. W.	2	Rail Diesel Car 1	Budd
		1	Rail Diesel Car 2	Budd

six 3,000-hp. and one 1,500-hp. road locomotives and four 1,000-hp. switchers. All the equipment, except two of the switchers (which are for hump operations in Lancaster yard), will be used to Dieselize completely all freight service between Big Spring, Tex., and El Paso.

SUPPLY TRADE

Poor & Co. Net Was $1,082,896

Net sales of Poor & Co., and subsidiaries last year totaled $19,277,876 and net income was $1,082,896, according to the recently released annual report. "The year 1949 was not as favorable for the company as was the year 1948, one of the peak years in the company's history," Fred A. Poor, chairman, and Philip W. Moore, president, said in the report. "Sales declined to about 84 per cent of the figure in the previous year and profits after all charges to about 67 per cent of the 1948 earnings. . . . The backlog of unshipped business . . . at year end had dropped to less than half of the figures at December 31, 1948. . . Some improvement in the order situation over the last quarter of 1949 is noted and it is to be hoped that it will not be too seriously affected by artificial forces."

Pressed Steel Car Reports 1949 Net of $1,689,390

Pressed Steel Car Company's net profit last year amounted to $1,689,390, equal, after preferred dividends, to $1.43 a common share, compared with a net loss of $2,270,841 in 1948, according to the recently released annual report. The improvement in earnings, John I. Snyder, Jr., president, said in the report, reflects "the tightening up job that was initiated in 1948 and which still continues." It was pointed out that the company shipped 6,478 freight cars in 1949, compared with 9,554 in the previous year, and that consolidated gross income for the year dipped to $41,279,936 from the $57,641,246 reported in 1948. Mr. Snyder described the freight car outlook for 1950 as "uncertain." He said the largest portion of cars ordered so far this year by railroads has been placed in railroad shops. In addition, he said, even if large orders are received in the future, a considerable delay would be experienced before enough steel would be available to begin production.

Symington-Gould 1949 Sales Were $10,074,081

Net sales of the Symington-Gould Corporation were $10,074,081 last year, compared with $15,461,131 in 1948, according to the recently released annual report. Net profit totaled $668,411, compared with $282,404 (after deducting, in 1948, the non-recurring loss on sale of the firm's Rochester, N. Y., facilities). Peter F. Rossmann, president, said in the report that all outstanding capital stock of Martin & Schwartz, Inc., Salisbury, Md., manufacturer of gasoline dispensing pumps for filling stations, had been purchased on January 6 for $2,000,000. Other proposals for diversification have been thoroughly analyzed, Mr. Rossmann added, and the search for additional railway and non-railway products is continuing.

South Chester Corporation, Philadelphia, Pa., has appointed **Allen-O'Neill Associates, Inc.,** San Francisco, Cal., as railway sales representatives.

George F. Wilhelmy has been appointed sales manager, Railway division, Cleveland, Ohio, of the **National Malleable & Steel Castings Co.,** to succeed **George R. Farrell,** who has retired after 43 years

George F. Wilhelmy

of service with the company. **Donald F. Kittredge** succeeds Mr. Wilhelmy as assistant sales manager of the division. **Robert D. Sowers** has been promoted to assistant sales manager of the division

George R. Farrell

at Chicago, to succeed **Frank E. Moffett,** who has retired after 41 years' service with the firm.

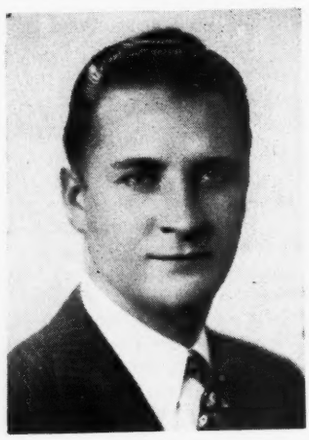
Mr. Wilhelmy joined National Malleable in 1905 in Cleveland, where he served four years. He was then transferred to New York, where he remained until 1919, when he returned to Cleveland to serve in various capacities until his appointment as assistant sales manager.

Mr. Farrell, a native of Saginaw, Mich., joined the company in Cleveland in 1907

Donald F. Kittredge

and served in the test and inspection department until 1922. In that year he was transferred to sales and made sales manager of the Railway division at Cleveland.

Mr. Kittredge was born in Sharon, Pa., and graduated from Cornell University in 1939. He served as a naval officer during the recent war and joined National Malleable at Indianapolis, Ohio, in



Robert D. Sowers

1946. He was transferred to the Railway division, sales, at Cleveland, in May, 1949.

Mr. Sowers, also a native of Sharon, attended Westminster College, New Wilmington, Pa. He joined the company in 1936 at the Sharon works. After service in the Navy during World War II he returned to the Sharon works, where he was assigned to industrial sales. He was transferred to Railway division sales in

1948 and has served in the Chicago sales office for the past year.

Mr. Moffett graduated from Lewis Institute, Chicago, where he was born. He joined National Malleable in 1908 at its

Frank E. Moffett

Melrose Park works, was transferred to sales in Chicago in 1930, and appointed assistant sales manager, Railway division, Chicago, in 1945.

Eugene W. Caruthers, who recently retired as assistant engineer in the office of the chief engineer of the Pennsylvania, has been appointed special engineer to the Reliance division of the **Eaton Manufacturing Company,** Massillon, Ohio, with headquarters as before at Philadelphia, Pa. Mr. Caruthers had served as assistant

Eugene W. Caruthers

engineer on the P.R.R. for 43 years. Before joining that railroad he had seen service with the New York Central, the Norfolk & Western and the Baldwin Locomotive Works. He has been a member of the Track committee of the American Railway Engineering Association for many years, and recently retired as its chairman.

Robert H. Morse, Jr., vice-president in charge of operations, **Fairbanks, Morse & Co.,** at Chicago, has been elected president, succeeding his father, **Col. Robert H. Morse,** who becomes chairman of the board. Born in New York on March 10, 1899, Robert H. Morse, Jr., received his higher education at Notre Dame and Harvard Universities. He started his career with the company in 1916 in the foundry of the Beloit, Wis., plant, and subsequently served as assistant manager of the Indianapolis, Ind., works until 1928, except for 18 months spent in the American Expeditionary Forces during World War I. In 1928 he became assis-

Robert H. Morse, Jr.

tant to president of the Central & South Western Utilities Company, Dallas, Tex., and from 1930 to 1932, served as vice-president and treasurer of the Inland Utilities Company, Kansas City, Mo. Mr. Morse later held the positions of branch manager for Fairbanks, Morse at Cincinnati, Ohio, and Dallas until his appointment as manager of the stoker division in 1938. The following year he was transferred to Boston, Mass., as branch manager, becoming assistant general sales manager at Chicago in 1942. He was advanced to vice-president and general sales manager in 1943, and was subsequently appointed vice-president in charge of operations.

Col. Robert H. Morse

Col. Robert H. Morse was born in Chicago on December 6, 1878, and was educated in that city and at Shattuck School, Faribault, Minn., and Hill School, Pottstown, Pa. He began his career in 1895 as an apprentice at the Beloit plant of Fairbanks-Morse Manufacturing Company (now Fairbanks, Morse & Co.). From 1897 to 1900, he was associated with Patterson, Goldfield & Hunter, New York, being appointed assistant manager of Fairbanks, Morse at Cleveland, Ohio, in 1901. He became sales manager of the company's Chicago branch in 1903, and was appointed first vice-president in 1924. Three years later he was made vice-chairman, and in 1931 was advanced to president and general manager.

Col. N. A. Powell, railroad sales manager for the southwestern division of **Armco Drainage & Metal Products, Inc.,** at Houston, Tex., has been appointed consultant, railroad sales, for the headquarters division at St. Louis, Mo. Col. Powell has served in the firm's sales department for the past 25 years, the first 18 of which were at St. Louis. Prior to that time he served with the Pennsylvania's Western region as engineer. **W. P. Lipscomb,** assistant railroad sales man-

Col. N. A. Powell

ager, southwestern division, at Houston, succeeds Col. Powell. He joined Armco in 1936, and has engaged in railroad sales in the southeast and southwest. Appointed railroad sales manager for the eastern division at Baltimore, Md., is **J. R. Hursh,** sales engineer in the Pittsburgh (Pa.) district. He has been with the firm since entering its drainage engineering division in 1940, with the exception of three years spent in the Navy as an officer in the Sea Bees.

The **American Lumber & Treating Co.** has moved its Portland (Ore.) sales office from the Terminal Sales building to 370 Pittock block.

Hubert D. Boggs, superintendent of the **Caterpillar Tractor Company's** steel fabrication factory at Peoria, Ill., has been promoted to factory manager at the company's new earthmoving equipment plant under construction at Joliet, Ill. (See *Railway Age* of March 4, page 69.) **W.**

G. Schuller, assistant purchasing agent at Peoria, has been appointed purchasing agent for the Joliet operations. **Otto F. Wiesemann,** scheduling division manager in the production division of the manufacturing department, has been appointed production division manager at Joliet.

Abel Howe Company has issued exclusive territory rights to the following concerns for sale and service of its overhead cranes, monorail systems, hoists and steel storage racks: Albert H. Cayne Equipment Corporation, New York; William R. Bauer & Co., Pittsburgh, Pa.; Prod..ct Handling Equipment Company, Cleveland, Ohio; E. G. Artz, Inc., Milwaukee, Wis., and J. Harry Greer, Kansas City, Mo.

A. L. McNeill, whose appointment as vice-president—national railroad sales of the **Okonite Company** was announced in the *Railway Age* of March 25, will maintain headquarters in Chicago. He will be responsible for coordinating the company's entire sales and promotional efforts in the railroad market throughout the United States.

Fifty years ago Mr. McNeill started his career as clerk in the purchasing department of the Chicago & Alton (now part of the Gulf, Mobile & Ohio). From 1908 to 1913 he was assistant purchasing agent for this line and its subsidiaries. He then went with the Central Electric Company of Chicago, at that time representing Okonite, as manager of railway sales. In 1925 he transferred with the same title to the Okonite Company, when it opened a Chicago sales office. In 1946 Mr. McNeill was elected vice-president of Okonite, and became district manager of the Chicago office.

A. L. McNeill

Frank S. Foster, assistant sales manager, Eastern division, of the **Caterpillar Tractor Company,** Peoria, Ill., has been transferred in that capacity to the Western division, succeeding **Truman E. Sage,** who has resigned to join the Northern Commercial Company, Seattle, Wash., the Caterpillar distributor for Alaska. **Gordon J. Fowler,** district representative in the San Joaquin valley, Cal., succeeds Mr. Foster.

James E. Candlin, Jr., associate director of the Mechanical division, **Pullman-Standard Car Manufacturing Company,** Chicago, has been appointed also deputy director of research. **Ralph Haman,** acting associate director of the Styling and Architectural division, has been made consultant for design and styling to the director of research, and has been succeeded by **Fred Girardy.**

Neal D. Howard, western editor of *Railway Age*, and editor of *Railway Engineering & Maintenance*, has resigned from those positions, effective April 1, to become secretary of the American Railway Engineering Association, and of the Engineering Division, Association of American Railroads. As western editor of *Railway Age*, he is succeeded by **William H. Schmidt, Jr.,** transportation editor, whose headquarters will remain in Chicago. As editor of *Railway Engineering & Maintenance*, Mr. Howard is succeeded by **Merwin H. Dick,** managing editor, who also will continue to serve as engineering editor of *Railway Age*, with headquarters as before at Chicago.

Mr. Howard's photograph, together with a description of his career, appeared in the *Railway Age* of March 18, page 60.

C. W. Bell has been appointed chief commercial engineer, and **A. W. Fisher** consultant in engineering, of the **Union Switch & Signal Co.,** at Swissvale, Pa., as announced in the *Railway Age* of March 4, page 69. Mr. Bell began his career in the signal department of the Canadian Government Railways in Moncton, N.B. He worked successively in signal construction, signal maintenance, and office engineering until 1923, when he was appointed signal inspector and draftsman in the signal engineer's office at Moncton. In 1925, Mr. Bell joined the engineering staff of Union Switch & Signal as an estimating engineer and, in 1938, was appointed supervisor of general engineering, the position he held at the time of his recent appointment.

C. W. Bell

Mr. Fisher was graduated from Pennsylvania State College in 1910 with a B.S. degree in electrical engineering and, in July of that year, joined the Pennsylvania as a signal apprentice. He advanced through various positions to that of assistant division operator, Pittsburgh division, on December 1, 1917. Mr. Fisher joined Union Switch & Signal on March 1, 1918, as a development engineer in d.c. apparatus and in March, 1925, was placed in charge of the section. He was appointed electrical engineer, d.c., on June 1, 1945, the position he held until his recent appointment.

A. W. Fisher

Harold A. Miller has been appointed sales personnel division manager in the general sales department of the **United States Steel Supply Company (United States Steel Corporation** subsidiary), with offices at the company's headquarters in Chicago. Mr. Miller has served as assistant in the sales personnel division of the U. S. Steel Corporation of Delaware (another U. S. Steel subsidiary) at Pittsburgh, Pa., since 1947.

The Baker Industrial Truck division of the **Baker-Raulang Company,** Cleveland, Ohio, has announced the appointments of **W. H. Haas** and **J. B. Akers,** of the firm of Haas & Akers, Washington, D. C., as special railroad representatives. In addition to handling sale of Baker equipment to railroads along the southeastern seaboard, the appointed firm will act in a consulting capacity on application of Baker trucks.

James R. Williams has been appointed sales promotion manager of the **Signode Steel Strapping Company,** Chicago, and in addition, will direct advertising and publicity activities. Mr. Williams has been associated with the company since 1946 and was formerly located in the Portland, Ore., office.

H. R. Condon, a vice-president in the Wood Preserving division of the **Koppers**

Company since 1929, has been appointed vice-president and general manager of the division, succeeding **W. F. Munnikhuysen,** who has been appointed executive vice-president of the company. Also **R. R. Holmes,** assistant general manager of the Tar Products division, has been appointed vice-president in that division.

The **Davey Tree Expert Company,** Kent, Ohio, has expanded its chemical brush and weed control division and now offers facilities for destruction of weeds and woody growth in industrial plant areas, along highways and along railroad rights-of-way.

The **Electro-Motive Division, General Motors Corporation,** has opened a new service office, known as the Washington Regional Service Office, in the Transportation building, Washington 6, D. C. All Electro-Motive service activities for railroads in southeastern United States will be directed from this point by **F. H. Albert,** newly appointed regional service manager. Territory served by the new office heretofore has been handled by the New York regional service office. Railroads in the northeastern part of the country continue to be served out of New York, under direction of **W. A. Turner,** former assistant regional service manager, now promoted to regional service manager. The new Washington office, and the New York service office, will be under the jurisdiction of **Paul Turner,** Eastern regional manager at New York.

O. L. Olsen, former regional service manager at New York, has been promoted to sales engineer in the Eastern region. **A. J. MacNeal,** former assistant manager of the service department technical section at LaGrange, Ill., has been appointed assistant to Mr. Albert at Washington. **R. B. Johnstone,** former manager of the service department technical section, is assistant to the regional service manager at New York.

FINANCIAL

Alleghany Corporation.—*Annual Report.*—Net income of this company, excluding security transactions, was $1,869,557 in 1949, compared with $3,925,952 in the preceding year. Security transactions during the year involved a net loss of $5,583,015, including net book loss on portfolio securities exchanged for Alleghany's own preferred stocks. Reduction in the firm's publicly outstanding preferred stocks, the report said, cut combined dividend arrears by $14,282,684.

Atlantic Coast Line.—*Security for Lease.*—The I.C.C. has authorized this road to pledge $463,000 of its general unified mortgage 4½ per cent bonds, series A, due June 1, 1964, in substitution for an equal amount of first-consolidated-mortgage 4 per cent bonds, due July 1, 1952, as pledged collateral guaranteeing performance of the lease of the Georgia Railroad. The lease of the Georgia is held jointly by the A.C.L. and the Louisville & Nashville, and the $463,000 pledge is the A.C.L.'s proportion of the collateral called for in the lease agreement. The I.C.C. report noted that the Georgia has agreed to the present substitution. The A.C.L. is arranging for refunding at least part of its first-consolidated-mortgage due in 1952, and it was in this connection that the substitution was requested.

Chicago Great Western.—*Dividend Impounded.*—Federal Judge John P. Barnes ordered this road to set aside 30 per cent of a forthcoming preferred stock dividend for possible use as attorney's fees in a stockholders' suit. The suit was brought by a group of preferred stockholders in an attempt to force payment of dividends on this class of stock. Alex Elson, attorney for the group, contended that if the suit was successful, he would not be able to collect fees from any company funds except dividends. Judge Barnes' order will entail setting aside some $67,000 from a payment equal to 62½ cents a share scheduled for March 31, to protect this contention.

New York, Susquehanna & Western-Pennsylvania.—*Construction of Viaduct.*—The I.C.C. has permitted the Erie to intervene in the case in which the N.Y.S. &W. and the P.R.R. seek authority to construct an interchange track via the so-called Croxton viaduct in Jersey City, N. J. (See *Railway Age* of March 11, page 105.) At present, interchange between the Susquehanna and the P.R.R. in Jersey City moves through the Erie's Croxton yard, and construction of the viaduct trackage would bypass this handling by the Erie.

Texas & Pacific.—*New Director.*—Sam D. Young, president of the El Paso (Texas) National Bank, has been elected to this road's board of directors to succeed the late E. A. Frost of Shreveport, La.

(*Continued on page* 76)

THE BALTIMORE AND OHIO RAILROAD COMPANY

SUMMARY OF 1949 ANNUAL REPORT

INCOME:	Year 1949		Comparison with 1948
From transportation of freight, passengers, mail, express, etc.	$356,708,017	D	$43,482,430
From other sources—interest, dividends, rents, etc.	7 067,637	I	537,820
Total Income	$363,775,654	D	$42,944,610
EXPENDITURES:			
Payrolls, materials, fuel, services and taxes	$321,895,524	D	$33,301,182
Interest, rents, and miscellaneous services	35,010,303	I	5,645,040
Total Expenditures	$356,905,827	D	$27,656,142
NET INCOME:			
For improvements, sinking funds, and other purposes	$6,869,827	D	$15,288,468

Due principally to work stoppages in the coal and steel industries, freight revenues were $39,728,935 less in 1949 than in 1948. Passenger revenues were $2,670,298 less.

The 40-hour week established for certain classes of employees September 1, 1949, and the increase in rates of pay, both recommended by the Presidential Emergency Board, were largely responsible for the high level of operating expenses in 1949.

The return on the net investment of the Company in property devoted to public transportation in 1949 was 2.77%, or 1.53 points less than the 4.3% in 1948.

During 1949, outstanding System interest-bearing debt, including equipment trusts, was further reduced $15,041,414.

A dividend of $1.00 per share on Preferred Stock was declared December 21, 1949, and paid January 25, 1950, to stockholders of record January 3, 1950.

R. B. WHITE, *President*

[Advertisement]

CANADIAN PACIFIC RAILWAY COMPANY

Sixty-Ninth Annual Report of the Directors

Year Ended December 31, 1949

(Abridged)

Highlights

YEAR'S RESULTS	1949	1948	Increase or *Decrease*
Gross Earnings	$ 363,252,094	$ 355,249,702	$ 8,002,392
Working Expenses	342,620,125	336,830,536	5,789,589
Net Earnings	20,631,969	18,419,166	2,212,803
Ratio, Net to Gross Earnings	5.7%	5.2%	0.5%
Other Income	$ 23,636,653	$ 24,864,949	*$ 1,228,296*
Interest and Rental Charges	14,543,817	15,890,264	*1,346,447*
Dividends:			
Preference Stock—4%	3,872,768	4,557,682	*684,914*
Ordinary Stock—5%	16,750,000	16,750,000	—
Balance for Modernization and Other Corporate Purposes	9,102,037	6,086,169	3,015,868

YEAR-END POSITION			
Property Investment	$1,381,246,250	$1,324,512,797	$56,733,453
Other Investments	193,444,952	234,431,233	*40,986,281*
Funded Debt	79,373,000	102,037,000	*22,664,000*
Reserves	503,527,526	486,524,243	17,003,283
Working Capital	89,283,032	97,715,688	*8,432,656*
TRAFFIC STATISTICS			
Tons of Revenue Freight Carried	56,445,684	60,036,833	*3,591,149*
Revenue Passengers Carried	11,969,457	13,629,044	*1,659,587*
Revenue per Ton Mile of Freight	1.20c	1.13c	0.07c
Revenue per Passenger Mile	2.72c	2.48c	0.24c

To the Shareholders:

The year 1949 was one of sustained industrial and commercial progress throughout Canada. Gross earnings from rail operations again surpassed those of any previous year, but net earnings, though showing a slight improvement over 1948, were substantially below the requirements found reasonable by the Board of Transport Commissioners. The rate of return on the net investment of your Company in rail property was 1.96% for the year 1949, far below an adequate level.

As your Directors have stated from time to time, net earnings from rail operations have been insufficient to provide any return to holders of ordinary stock. But for the unusually large income from other sources it would not have been possible for your Company to meet even the modest dividend that has been paid in recent years.

On the application of the Railways made in July 1948 for an increase of 20% in freight rates, the Board of Transport Commissioners announced its decision in September 1949, authorizing an interim increase of 8% (except on grain rates within Western Canada) and a specific increase of 8c per ton on coal and coke. The judgment postponed the final determination of the application until several investigations and studies had been completed, including those of the Royal Commission on Transportation which has been sitting since the early summer of 1949.

An appeal was taken by your Company to the Supreme Court of Canada on two questions of law arising out of the judgment of the Board. The Court held that the Board had erred in postponing the final determination of the application of the Railways, and certified its opinion that the Board had failed to perform the duty imposed upon it by the Railway Act.

The Board, at the request of your Company, then set the application down for final hearing, which was concluded on February 7 last. The judgment of the Board, dated February 28, finds that in place of the 8% interim increase previously allowed, the Railways should now be allowed a 16% increase. On coal and coke an increase of 15c per ton instead of 8c is authorized. It is estimated that these increases, had they been in effect for the full year 1949, would have yielded to your Company only $22 million, while the revenue deficiency as established by the Board itself amounted to approximately $30 million. The steps necessary to redress this situation are now under consideration.

The Income and Profit and Loss accounts of your Company show the following results for the year ended December 31, 1949:

Income Account

Gross Earnings		$363,252,094
Working Expenses		342,620,125
Net Earnings		$ 20,631,969
Other Income		23,636,653
		$ 44,268,622
Fixed Charges		14,543,817
Net Income		$ 29,724,805
Dividends—Preference Stock:		
2% paid August 1, 1949	$2,131,203	
2% payable Feb. 1, 1950	1,741,565	
	$ 3,872,768	
Dividends—Ordinary Stock:		
2% paid October 1, 1949	6,700,000	
		10,572,768
Balance transferred to Profit and Loss Account		$ 19,152,037

(The final dividend of 3% on the Ordinary Stock which was declared subsequent to the end of the year and is payable March 31, 1950, amounting to $10,050,000, is not deducted in the accounts for the year 1949.)

Profit and Loss Account

Profit and Loss Balance December 31, 1948		$196,737,313
Final dividend of 3% on the Ordinary Stock, declared from the earnings of the year 1948, paid March 31, 1949		10,050,000
		$186,687,313
Balance of Income Account for the year ended December 31, 1949	$19,152,037	
Portion of steamship insurance recoveries representing compensation for increased cost of tonnage replacement.	576,264	
Miscellaneous Net Credit	315,163	
		20,043,464
Profit and Loss Balance December 31, 1949, as per Balance Sheet		$206,730,777

Railway Operations

Gross earnings increased $8 million, or 2.3%, over those of 1948. Of this, about $6 million is attributable to freight traffic. There was a net increase of approximately $18 million from adjustments in freight rates, but this was largely offset by a drop of nearly $12 million in the volume of traffic, which was 6% lower, measured in tons, and 4% lower measured in ton miles.

Working expenses increased $5.8 million. Of this increase $4.2 million resulted from the general wage increase of 17c per hour, which was in effect for the full year 1949, as compared with ten months in 1948.

[Advertisement]

Maintenance expenses increased $5.6 million — $2.5 million in maintenance of way and structures and $3.1 million in maintenance of equipment.

Track laying expense was greater, principally because of the installation of additional quantities of track material, including 223 more track miles of rail.

Equipment repair expense was higher owing to increased wage and material costs and to the increased number of freight and passenger cars repaired.

Maintenance expenses were credited with an amount of $7.5 million withdrawn from the Maintenance Fund. Of this amount, $6.25 million was applicable to track materials. Withdrawals from the Fund, as in 1948, were based on a formula which was applied without regard to the increase in prices of these materials as compared with prices at the time the accruals to the Fund were made.

Depreciation charged to maintenance expense was $2.5 million less than in 1948. Of this, $2.2 million resulted from the adoption of revised user rates developed in studies made during the year. The service lives on which the user rates now are based closely correspond with those on which the Board of Transport Commissioners based its straight-line depreciation rates for rate making purposes in its judgment of September 20, 1949.

Transportation expenses were little changed from last year, but the ratio of these expenses to gross earnings declined to 42.4% from 43.4% in 1948. This reduction resulted largely from a substantial decrease in fuel expense, the increased use of diesel power being a factor.

Operating performance showed an improvement; the average freight train load was greater and freight train speed increased. There was, however, a substantial increase in empty freight car miles.

Net earnings from railway operations in 1949 amounted to $20.6 million, an increase of $2.2 million. The ratio of working expenses to gross earnings was 94.3%, a fractional reduction only from 94.8% in 1948, the highest ever recorded. Between the years 1920 and 1939 this ratio varied from a low of 77.3% to a high of 85.4%.

Other Income

Other income amounted to $23.6 million, a decrease of $1.2 million compared with 1948.

Net earnings from ocean and coastal steamship operations decreased $454,000. Ocean freight traffic was much lower and the effect of this was only partially offset by higher passenger carryings due to the return of the "*Empress of France*" to the Atlantic route. Two new vessels placed in operation on the British Columbia Coast routes favourably affected the results for the year.

Net earnings of hotels increased $640,000. Revenues were higher, mainly owing to the increases in rates for rooms and meals, made in July 1948, being effective for a full twelve months.

Net earnings from communication services increased $780,000. Rentals from leased wires were higher and there was an improvement in revenues from domestic messages resulting from an increase in tolls of 15% made effective July 4.

Dividend income decreased $2.8 million, principally because of the lower dividend paid by The Consolidated Mining and Smelting Company of Canada, Limited. The dividend rate on the stock of that company was reduced from $11.00 in 1948 to $9.50 in 1949.

Net income from interest, exchange, separately operated properties and miscellaneous sources increased $666,000. Contributing to this increase was the inclusion of $698,000 representing the net income of the Insurance Fund. The policy adopted in 1941 of retaining such income in the Fund was considered for the present to be unnecessary. Also included was an amount of $359,000 received as interest for the period 1945 to 1948 on Duluth, South Shore and Atlantic Railroad income bonds acquired on the reorganization of that company. Offsetting in part this additional income, was a reduction in interest earned by the Steamship Replacement Fund and an increase in the operating loss of the Northern Alberta Railways, half of which is borne by your Company.

Fixed Charges

Fixed charges amounted to $14.5 million for the year, a decrease of $1.3 million.

Rents for leased roads and interest on Consolidated Debenture Stock payable in sterling were lower as a result of devaluation. The effect of this devaluation was offset somewhat by increased charges on equipment obligations, on Consolidated Debenture Stock and on Collateral Trust Bonds payable in United States currency, because of the devaluation of the Canadian dollar.

Guaranteed interest was lower owing to the maturity on January 1, 1949, of Soo Line Second Mortgage Bonds.

Net Income and Dividends

Net income, after payment of fixed charges, amounted to $29.7 million, an increase of $2.3 million. Dividends declared from net income aggregated $20.6 million. This amount included dividends of 4% on the Preference Stock and 5% ($1.25 per share) on the Ordinary Stock, of which the final 3% was declared after the close of the year.

Earnings per share on the Ordinary Stock amounted to $1.93 per share. This compares with $1.70 in 1948 and $2.04 in 1947.

Profit and Loss Account

The Profit and Loss balance of $196.7 million at December 31, 1948, was reduced by $10 million, the amount of the 3% dividend on Ordinary Stock, which was declared after the close of 1948 and paid on March 31, 1949.

Miscellaneous—Net Credit, amounting to $315,000, included a credit of $438,000 representing the unused balance of investment reserves set up to provide for potential losses in respect of investment in controlled lines in the United States. Other miscellaneous charges and credits were principally in respect of adjustments in property investment account.

Land Accounts

Land sales amounted to $3 million, which included 27,868 acres of timber lands and 59,880 acres of farming land, the latter at an average price of $5.12 per acre. At the end of the year land holdings consisted of 1,627,145 acres, of which 1,000,863 were farm and pasture lands and the balance timber lands and townsites.

At the close of the year 35,880 acres in respect of which your Company holds title to petroleum rights, under varying reservations, were under lease to oil companies and 11,193,882 acres were under reservation for exploration. Oil production increased over 1948 and royalty payments were therefore higher. Rents, royalties and reservation fees produced $1.7 million in 1949, an increase of $515,000 over 1948.

Cash received on land account totalled $5.5 million. Disbursements, including taxes, were $1.5 million. Deferred payments on lands and townsites at the close of the year were $8.5 million, a reduction of $585,000 from the 1948 balance.

Balance Sheet

Total assets at the end of the year amounted to $1,714 million.

Property investment increased $56.7 million. The largest item of expenditure was $44.6 million for rolling stock, of which $9.5 million was for motive power, $25.3 million for freight train cars and $9.5 million for passenger train cars.

Funds amounting to $16.7 million on hand from equipment trust certificates issued during 1948 were applied towards the cost of new equipment delivered in 1949.

The Log Chateau at Montebello, Que., and certain other physical assets of the Seigniory Club Community Association were acquired by your Company in consideration, mainly, of the surrender of $2 million First Mortgage Income Bonds of the Association. The assets so acquired have been leased to the Association for a period of 25 years.

Part of the advances made to Canadian Pacific Transport Company and to Canadian Pacific Air Lines for working

[Advertisement]

capital and other purposes were repaid through the issuance to your Company of additional capital stocks of these wholly-owned subsidiaries.

The Maintenance Fund was reduced by $7.5 million.

Withdrawals from the Steamship Replacement Fund included $5 million, representing construction costs of British Columbia Coast vessels and reconversion costs of the *"Empress of Scotland"*, and $10.7 million used to redeem Collateral Trust bonds.

Working capital of $89.3 million at the end of the year was $8.4 million lower than at the end of 1948.

Finance

The amount of serial equipment obligations discharged during the year was $12 million.

On July 2, 1949, $10.7 million 4% Collateral Trust Bonds matured. Because of the present extraordinarily high cost of shipbuilding and the uncertain conditions prevailing in the Orient, your Directors have not considered it wise to undertake the replacement of ships for use on the Pacific Ocean, or for the expansion of your Atlantic Fleet. In order, therefore, to make the best use in the meantime of the funds set aside for that purpose, it was decided to appropriate $10.7 million from the Steamship Replacement Fund to redeem these bonds. This sum was deposited with the Trustee for the issue.

These transactions resulted in a net decrease of $22.7 million in funded debt during the year and a reduction of $13.6 million in the amount of Consolidated Debenture Stock pledged as collateral.

Pensions

Expenditures for pensions during the year amounted to $10.4 million. These included the proportion of pension allowances paid by your Company, its contribution to the Pension Trust Fund and levies in respect of employees covered by the United States Railroad Retirement Act. The periodic review of the pension position recently completed by the Actuary indicated that owing to the larger number of employees and higher wage rates, the resulting pensions to emerge in future years will be substantially increased. To assist in providing for increased pensions, your Directors authorized an increase from $1.75 million to $3 million in the annual contribution to the Pension Trust Fund.

The number of employees pensioned during 1949 was 1,326; and 574 pensions were terminated by death. At the end of the year there were 10,388 on the pension payroll, an increase of 752.

Employee Relations

"Non-operating" employees of Canadian railways, including hotel employees and employees of other ancillary operations, have made demands for a forty-hour week with the same weekly earnings, and a wage increase of seven cents per hour (ten cents in some cases). Compliance with these requests would cost your Company approximately $35 million annually. When negotiations failed to bring about a settlement, the Minister of Labour established two Boards of Conciliation which began their investigations into the disputes early in 1950.

Canadian Pacific Air Lines, Limited

Operations of your Air Lines resulted in a net loss of $113,000 as compared with a net loss of $194,000 in 1948.

Operations in Canada continue to show improvement and revenues increased. The Pas operations were augmented by opening of the Winnipeg-Churchill service on June 7. A service from Montreal to Noranda was commenced on May 16. The survey division ceased operations March 1.

The year 1949 marked the official opening of commercial operations on the new Pacific routes. Service to Australia via Honolulu commenced July 13 and to Japan and China via Alaska September 19. In order to provide more efficient and economical operation, an order has been placed for delivery of two De Havilland "Comet" jet-propelled aircraft which are expected to be in service by 1952. These aircraft are particularly suitable for operation over the long distances encountered in the Pacific service due, in part, to their considerably higher cruising speed.

An additional 600,000 shares of stock of your Air Lines were issued to your Company in exchange for advances of $3 million previously made. To meet obligations in connection with the Pacific service an advance of $2 million was made during the year. These transactions brought your total investment in Air Lines to $11 million at the close of 1949.

United States Subsidiaries

Net income of Minneapolis, St. Paul & Sault Ste. Marie Railroad Company, after provision for fixed and contingent charges, amounted to $1.1 million, a decrease of $622,000 compared with 1948. Gross earnings decreased $1.6 million, principally as a result of lower freight tonnage handled in 1949; offsetting this, in part, was a decrease of $1 million in expenses. A dividend of $1.00 per share on the capital stock, the same rate as paid in 1948, was declared on February 21, 1949. This amounted to $719,000, of which your Company received $360,000.

Under the plan of reorganization approved by the Interstate Commerce Commission and the Court, the reorganization managers formed a new company, under the laws of the State of Minnesota, to take over the properties of The Duluth, South Shore and Atlantic Railway Company and Mineral Range Railroad Company as from November 1, 1949. The new company is named Duluth, South Shore and Atlantic Railroad Company.

In accordance with the plan, the initial capitalization of the new South Shore Company consists of $5 million First Mortgage 4% Income Bonds and $10.5 million Common Stock, represented by 210,000 shares having a stated value of $50 per share. Your Company received $4.1 million of the new bonds, all of the new stock, and $1.2 million in cash. The new bonds and stock have been recorded in the accounts of your Company at $13.6 million which is the remaining book value of investments in, and advances to, the old companies after giving credit for the cash payment referred to.

South Shore operations during 1949 resulted in an operating deficit of $539,000, compared with net earnings, on a comparable basis, of $748,000 in 1948. A marked decrease in freight earnings was the principal factor in this result.

Hearings in the reorganization proceedings of the Wisconsin Central continued before an Examiner of the Interstate Commerce Commission. Evidence was presented in support and rebuttal of the proposal of a group of bondholders for modification of the plan of reorganization approved by the Commission, designed to increase their proportion of new securities. Further briefs on the subject are to be filed by the interested parties.

Rates and Services

On April 23, the Board of Transport Commissioners delivered a judgment upholding the application of the Province of British Columbia for removal of the so-called "Mountain Differential" in freight rates. This adjustment in rates became effective July 1.

An interim increase of 8% in Canadian class and commodity rates and a specific increase of 8c per ton on coal and coke were authorized by the Board of Transport Commissioners in its judgment of September 20, and were made effective October 11. Grain rates in Western Canada were not affected.

Rates on international, overhead and certain import and export traffic were subject to two increases granted United States railways in 1949, and made applicable in Canada to these classes of traffic by authority of the Board of Transport Commissioners. The first, averaging 5.4%, was made effective January 11, and a further increase of approximately 3.7% became effective September 1.

Various increases in passenger fares in Canada were put into effect during the year. Sleeping and parlour car fares were increased approximately 25% on January 15. Coach and first class fares were raised 15% on April 10 and May 11, respectively.

Special express rates issued to meet motor truck competition within Canada were increased by 8%, effective October 11.

Rates on the British Columbia Coast steamships were increased by varying amounts during the year.

An increase of 15% on domestic message telegraph tolls

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was authorized by the Board of Transport Commissioners, effective July 4.

Negotiations are still under way on the application made by the Railway Association of Canada in November 1948 for an increase of 55% in mail rates payable by the Government of Canada.

New motive power delivered during the year consisted of 6 steam locomotives and 48 diesel-electric units, of which 20 were road units and 28 were yard switchers. The changeover to diesel-electric motive power for all services on the Esquimalt & Nanaimo Railway on Vancouver Island was completed during 1949. Diesel power was also placed in use on the Montreal-Newport-Wells River line in June. The efficiency and economy of this type of power have been satisfactorily demonstrated.

A total of 3,596 new freight cars and 45 new passenger cars were placed in service. The passenger cars included 14 coaches and 5 roomette units.

The new classification yard in the Montreal area was nearly completed at the end of the year. The yard occupies an area of 680 acres. Traffic entering or leaving the yard will be controlled by a modern centralized traffic control system. Movement of cars from the hump to the classification tracks will be handled by push-button control through retarders and power operated switches. When complete, the yard will be one of the most up-to-date on this continent, and will meet the requirements of modern traffic conditions.

Capital Appropriations

In anticipation of your confirmation, capital appropriations aggregating $9 million, in addition to those approved at the last Annual Meeting, were authorized by your Directors during the year. The principal items were $4 million for the new vessel for the Vancouver-Nanaimo route, $3.6 million for the modernization of the "*Empress of Scotland*" and $535,000 for additions and betterments to communication facilities.

Your approval will be requested also for capital appropriations of $33.4 million for the year 1950.

The appropriations for new rolling stock make provision for 58 diesel units, 720 freight cars, 50 express cars and 317 work cars. The diesel units, consisting of 30 "A" units, 20 "B" units, 4 road switchers and 4 yard switchers, will be placed in service between Cartier and Fort William on the Schreiber Division in Ontario.

Directorate

The undermentioned Directors will retire from office at the approaching Annual Meeting. They are eligible for re-election:

THE RT. HON. SIR JOHN ANDERSON, G.C.B., MR. L. J. BELNAP HON. ERIC W. HAMBER, C.M.G., MR. ROSS H. MCMASTER MR. G. A. WALKER, K.C.

Officers and Employees

It is a pleasure for your Directors to record again their appreciation of the effective work of officers and employees in all branches of the service. Their co-operation in the constant effort to achieve efficiency in operations is gratefully acknowledged.

For the Directors,
W. A. MATHER, *President*

MONTREAL, MARCH 13, 1950.

Canadian Pacific Railway Company • General Balance Sheet, December 31, 1949

ASSETS

Property Investment:		
Railway, Rolling Stock and Inland Steamships	$964,265,009	
Improvements on Leased Property	116,768,991	
Stocks and Bonds—Leased Railway Companies	134,883,654	
Ocean and Coastal Steamships	62,476,772	
Hotel, Communication and Miscellaneous Properties	102,851,824	
		$1,381,246,250
Other Investments:		
Stocks and Bonds—Controlled Companies	$ 71,923,324	
Miscellaneous Investments	47,157,050	
Advances to Controlled and Other Companies	6,819,809	
Mortgages Collectible and Advances to Settlers	981,051	
Deferred Payments on Lands and Townsites	8,492,454	
Unsold Lands and Other Properties	11,546,859	
Maintenance Fund	17,850,000	
Insurance Fund	13,188,540	
Steamship Replacement Fund	15,485,865	
		193,444,952
Current Assets:		
Material and Supplies	$ 46,305,383	
Agents' and Conductors' Balances	13,875,642	
Miscellaneous Accounts Receivable	17,670,714	
Government of Canada Securities	22,889,000	
Cash	33,635,855	
		134,376,594
Unadjusted Debits:		
Insurance Prepaid	$ 80,438	
Unamortized Discount on Bonds	2,787,245	
Other Unadjusted Debits	1,629,937	
		4,497,620
		$1,713,565,416

LIABILITIES

Capital Stock:		
Ordinary Stock	$335,000,000	
Preference Stock— 4% Non-cumulative	137,256,921	
		$ 472,256,921
Perpetual 4% Consolidated Debenture Stock	311,945,729	
Less: Pledged as collateral to bonds and equipment obligations	16,507,500	
		295,438,229
Funded Debt		79,373,000
Current Liabilities:		
Pay Rolls	$ 8,117,505	
Audited Vouchers	14,769,474	
Net Traffic Balances	3,974,440	
Miscellaneous Accounts Payable	5,141,369	
Accrued Fixed Charges	651,677	
Unmatured Dividend Declared	1,741,565	
Other Current Liabilities	10,697,532	
		45,093,562
Deferred Liabilities:		
Government of Canada Unemployment Relief	$ 1,447,223	
Miscellaneous	2,938,789	
		4,386,012
Reserves and Unadjusted Credits:		
Maintenance Reserves	$ 17,850,000	
Depreciation Reserves	464,871,524	
Investment Reserves	3,498,643	
Insurance Reserve	13,188,540	
Contingent Reserves	4,118,819	
Unadjusted Credits	6,714,070	
		510,241,596
Premium on Capital and Debenture Stock		34,458,562
Land Surplus		65,586,757
Profit and Loss Balance		206,730,777
		$1,713,565,416

ERIC A. LESLIE,
Vice-President and Comptroller

TO THE SHAREHOLDERS,
CANADIAN PACIFIC RAILWAY COMPANY:

We have examined the above General Balance Sheet of the Canadian Pacific Railway Company as at December 31, 1949, the Income and Profit and Loss Accounts for the year ending on that date and other related schedules, and have compared them with the books and records of the Company.

The records of the securities owned by the Company at December 31, 1949, were verified by an examination of those securities which were in the custody of its Treasurer and by certificates received from such depositaries as were holding securities in safe custody for the Company.

In our opinion the General Balance Sheet, Income and Profit and Loss Accounts and the other related schedules are properly drawn up so as to present fairly the financial position of the Company at December 31, 1949, and the results of its operations for the year then ended, according to the best of our information and the explanations given to us and as shown by the books of the Company.

Montreal, March 10, 1950

PRICE, WATERHOUSE & CO.
Chartered Accountants

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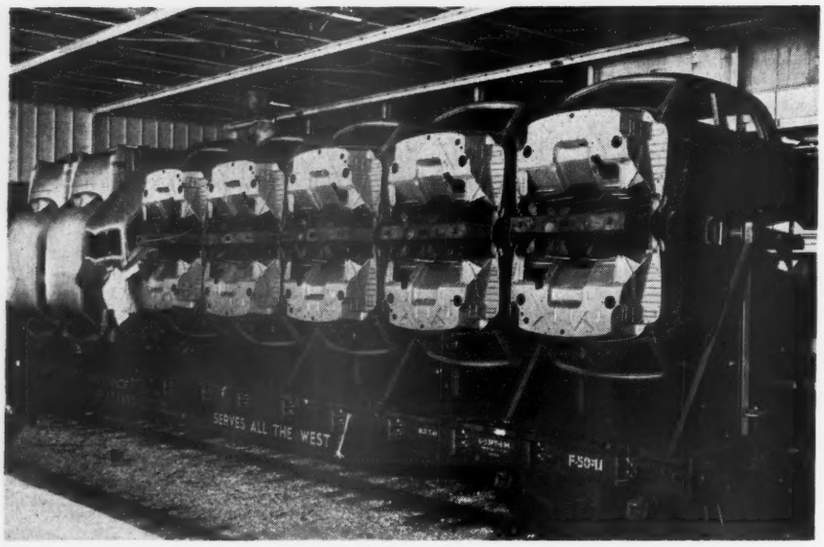


The Union Pacific, in cooperation with Kaiser-Frazer Corporation, has put into service special freight cars for delivery of completed "bodies-in-white" to the K.-F. assembly plant at Long Beach, Cal. A unique "pinwheel" mounting arrangement permits loading of 16 bodies to the car, with eight bodies riding upright in two parallel rows, which is double the capacity of conventional freight cars. Besides halving per-body freight costs, the new method saves loading and unloading time. Heavy component parts—engines, chassis, etc. — are shipped in conventional manner

New Securities

Applications have been filed with the Interstate Commerce Commission by:

Pennsylvania.—To assume liability for $10,110,000 of series Z equipment trust certificates, the first installment of a proposed $20,115,000 issue. The entire issue would finance in part purchase of 91 Diesel-electric locomotives, 19 sleeping cars, and 1,700 freight cars at an estimated total cost of $25,143,750. The road listed the equipment as follows:

	Description and Builder	Estimated Unit Cost
16	1,600-hp. "A" freight units (Fairbanks, Morse & Co.) ..	$183,000
8	1,600-hp. "B" freight units (Fairbanks, Morse)	159,000
6	660-hp. switching locomotives (American Locomotive Company)	79,000
4	660-hp. switching locomotives (American)	84,000
6	2,000-hp. switching locomotives, each consisting of two 1,000-hp. switching units with MU control (American)	120,000
4	2,400-hp. switching locomotives, each consisting of two 1,200-hp. switching units with MU control (Electro-Motive Division, General Motors Corporation)	108,000
2	1,200-hp. switching locomotives with MU control (Electro-Motive)	108,000
12	1,200-hp. switching locomotives (Electro-Motive)	99,000
33	600-hp. switching locomotives (Electro-Motive)	78,000
19	Steel and aluminum sleeping cars (American Car & Foundry Co.)	140,000
1,000	Steel gondolas (Company shops)	5,650
500	Steel gondolas (Company shops)	5,250
100	Cabin cars (Company shops).	11,975
100	Cabin cars (Company shops).	17,210

The series Z certificates would be dated April 1, would be sold by competitive bids, and be payable in 15 annual installments of $1,341,000 each, beginning April 1, 1951. The P.R.R. said in its application that the present installment will be sold and proceeds applied against certain of the above equipment on which early delivery is expected. The interest rate on this installment will be set by the bidding.

Wheeling & Lake Erie-New York, Chicago & St. Louis.—To permit the Wheeling to issue and sell $4,000,000 of general and refunding mortgage series C 2¾ per cent bonds, and the Nickel Plate to assume liability for the bonds. The I.C.C. authorized issuance of the bonds on August 11, 1949, on condition that a sinking fund be established before sale or other disposition. Following lease of the Wheeling properties to the Nickel Plate, the commission authorized the latter to assume liability for the bonds effective upon their disposition.

The Wheeling now proposes to sell the bonds at competitive bidding. Proceeds will be used, in part, to prepay a note of $3,761,700 held by the Chase National Bank of New York. The note matures November 1, but may be paid prior to that date without premium. The balance of the proceeds from sale of the bonds will be retained in the Wheeling treasury and used to reimburse the Nickel Plate from time to time for expenditures made on behalf of the Wheeling.

Sinking fund provisions for the bonds provide for payment of $70,000 a year, on a semiannual basis beginning February 15, 1951. The bonds, dated August 15, 1949, and scheduled to mature August 15, 1974, would bear interest at 2¾ per cent from February 15, 1950.

Division 4 of the I.C.C. has **authorized:**

Belt of Chicago.—To assume liability for $2,832,000 of equipment trust certificates, to finance in part 20 new Diesel-electric locomotives costing approximately $2,992,915. (See *Railway Age* of February 4, page 68.) Under an agreement entered on January 3, 1950, the 12 proprietary companies of the Belt agreed to advance the down payment of $160,915 for the locomotives. The certificates will be dated April 1 and mature in 24 semiannual installments of $118,000 each, beginning October 1. The proprietary companies will make avances on a monthly basis to enable the Belt to meet semiannual payments. The commission approved a selling price of 99.16 with interest at 2¼ per cent — the bid of Kidder, Peabody & Co. on behalf of itself and the New York Hanseatic Corporation — which will make the average annual interest cost approximatelv 2.4 per cent. The certificates were reoffered to the public at prices yielding from 1.25 to 2.6 per cent, according to maturity.

In authorizing the issue the commission dismissed "for want of jurisdiction" that part of the application in which the 12 proprietary companies sought authority to assume liability for the certificates on the basis of the January 3 agreement. The commission said the agreement was a "collateral arrangement" between the roads and added that the Belt was to issue no securities to cover the advances. It then said that section 20a of the Interstate Commerce Act was "intended to apply to instruments of negotiable or quasi-negotiable character," and that the making of a contract is not an issue of securities within the provisions of section 20a.

Central of New Jersey.—To assume liability for $1,350,000 of its own equipment trust certificates, series A, and to assume liability jointly with its affiliate, the Central of Pennsylvania, for $1,815,000 of the latter's equipment trust certificates, series A. Proceeds of the C.N.J. issue will finance in part 12 Diesel-electric locomotives at an estimated total cost of $1,702,136, while the Pennsylvania company's issue will finance in part 12 other Diesel-electric locomotives and 125 covered hopper cars at an estimated total cost of $2,277,768. (See *Railway Age* of March 4, page 71).

Both issues of certificates will be dated April 1 and mature in 15 annual installments beginning April 1, 1951, the installments on the $1,350,000 issue being $90,000 each, and those on the $1,815,000 issue being $121,000 each. The successful bid for the two issues was made by Salomon Bros. & Hutzler. Its bid on the C.N.J. issue was 99.308 with a 2½ per cent interest rate, which will make the average annual cost to this road approximately 2.62 per cent. These certificates were reoffered to the public at prices yielding from 1.55 to 2.8 per cent, according to maturity. On the Pennsylvania company's issue the bid was 99.308 with interest at 2⅜ per cent, making the average annual cost to that company approximately 2.49 per cent. This issue was reoffered to yield 1.45 to 2.7 per cent, according to maturity.

Chesapeake & Ohio.—To assume liability for $5,070,000 of equipment trust certificates to finance in part 7 Diesel-electric locomotives and 39 passenger-train cars, costing an estimated total of $6,374,144. (See *Railway Age* of March 11, page 105). The certificates will be dated April 1, and will mature in 30 semiannual installments of $169,000 each, beginning October 1, 1950. The commission's report approved a selling price of 99.1727 with interest at 2⅛ per cent—the bid of Lehman Brothers and 3 associates—which will make the average annual cost of the proceeds approximately 2.25 per cent. The certificates were reoffered to the

public at prices yielding from 1.15 to 2.5 per cent, according to maturity.

Chicago, Burlington & Quincy.—To assume liability for $10,200,000 of equipment trust certificates to finance in part 40 new Diesel-electric locomotives and 30 gallery-type suburban passenger cars costing approximately $12,767,350. (See *Railway Age* of March 4, page 71). The certificates, to be dated March 1, will mature over a 15-yr. period in 30 semi-annual installments of $340,000 each, beginning September 1, 1950. The commission approved a selling price of 99.6776 with interest at 2⅛ per cent — the bid of Harriman Ripley & Co. and Lehman Brothers and seven associates — which will make the average annual cost approximately 2.17 per cent. The certificates were reoffered to the public at prices yielding from 1.2 to 2.4 per cent, according to maturity.

International-Great Northern.—To assume liability for $900,000 of equipment trust certificates, series DD, to finance in part 7 Diesel-electric locomotives at an estimated total cost of $1,196,315. (See *Railway Age* of March 4, page 72). The certificates will be dated April 1, and will mature in 15 annual installments of $60,000 each, beginning April 1, 1951. Successful bid for the issue was made by R. W. Pressprich & Co. with an offer of 99.606 and a 2⅜ per cent interest rate. This will make the average annual cost of the proceeds approximately 2.45 per cent. The certificates were reoffered to the public at prices yielding from 1.4 to 2.625 per cent, according to maturity.

Missouri Pacific.—To assume liability for $3,000,000 of equipment trust certificates, series NN, to finance in part 21 Diesel-electric locomotives costing an estimated $3,753,498. (See *Railway Age* of March 4, page 72). The certificates, to be dated April 1, will mature in 15 annual installments of $200,000 each, beginning April 1, 1951. The commission approved a selling price of 99.727 with interest at 2⅜ per cent, which will make the average annual cost of the proceeds approximately 2.43 per cent. The accepted bid was that of Salomon Brothers & Hutzler and 3 associates. The certificates were reoffered to the public at prices yielding from 1.45 to 2.6 per cent, according to maturity.

St. Louis, Brownsville & Mexico.—To assume liability for $975,000 of equipment trust certificates, series DD, to finance in part nine Diesel-electric locomotives costing an estimated total of $1,248,595. (See *Railway Age* of March 4, page 72). The certificates, dated April 1, will mature in 15 annual installments of $65,000 each, beginning April 1, 1951. The commission approved a selling price of 99.78 with interest at 2⅜ per cent—the bid of R. W. Pressprich & Co.—which will make the average annual cost of the proceeds approximately 2.42 per cent. The certificates were reoffered to the public at prices yielding from 1.4 to 2.6 per cent, according to maturity.

Southern Pacific.—To issue not exceeding $37,727,600 of convertible debenture bonds and 754,552 shares of common stock, the latter to be issued as required to provide for conversion of the bonds. (See *Railway Age* of February 25, page 65). Stockholders of record as of March 10 were given until March 31 to subscribe for the debentures at par at the rate of $10 for each share of stock held. Meanwhile, the S.P. through competitive bids arranged to sell all unsubscribed debentures to Blythe & Co. and Salomon Bros. & Hutzler on the basis of a bid whereby they have taken the bonds at par, with a 3 per cent interest rate, and received an underwriting fee of $735,688.20. The commission calculated that this was equivalent to sale of the bonds at 98.05. In handling sale of the unsubscribed debentures to the public, the underwriters are to pay to the S.P. 50 per cent of any net profit between $175,000 and $425,000, and 75 per cent of such net profit over $425,000.

The convertible debentures, dated April 1, will be due April 1, 1960. Their indenture contains sinking fund provisions and there are other provisions for redemption of the bonds both under the sinking fund and at the option of the S.P. Proceeds from sale of the issue will reimburse the road for expenditures made in redeeming an "secured bond" issue in 1946, and will provide cash toward the S.P.'s proposed $97,329,000 program of additions and betterments during 1950.

The 754,552 shares of common stock in connection with the debenture issue are a part of the 2,171,754 shares which the road has authorized but unissued. The shares will be without par value but will have a conversion value of $55 a share, subject to adjustments. Such conversion will be on the basis of 2 shares of stock for each $100 of debentures with cash or scrip adjustments to the prevailing conversion price.

Average Prices Stocks & Bonds

	Mar. 28	Prev. week	Last year
Average price of 20 representative railway stocks	42.21	42.52	40.09
Average price of 20 representative railway bonds	93.31	92.55	87.04

Dividends Declared

Illinois Terminal.—common, 20¢, quarterly, payable May 1 to holders of record April 10.

Mahoning Coal.—$12.50, payable April 1 to holders of record March 31.

Maine Central.—5% preferred, on arrears, $5.00, payable June 1 to holders of record May 15.

Texas & Pacific.—common, $1.00; 5% non-cumulative preferred, $1.25, quarterly; both payable April 7 to holders of record March 31.

Vermont & Massachusetts.—$3.00, semiannual, payable April 7 to holders of record March 30.

RAILWAY OFFICERS

EXECUTIVE

W. C. Pinschmidt, engineering assistant to vice-president of the Chesapeake & Ohio at Cleveland, Ohio, has been transferred to Richmond, Va., as engineering assistant to vice-president—construction and maintenance of the Chesapeake and Pere Marquette districts.

FINANCIAL, LEGAL & ACCOUNTING

M. M. Sherfy has been appointed auditor of passenger accounts of the Southern Pacific Lines at Houston, Tex., succeeding **C. P. Coleman,** who has retired after nearly 55 years of service.

Clarence Raymond and **R. W. Henriott,** assistant commerce attorneys of the Louisville & Nashville at Louisville, Ky., have been advanced to commerce attorneys.

M. N. Ray, chief claim agent of the New York Central System at Detroit, Mich., has been transferred in that capacity to Chicago. He is succeeded by **P. H. Winter.**

OPERATING

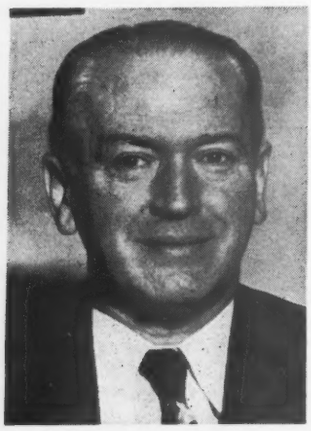
Frank Hugo Reynolds, whose retirement as superintendent, Cincinnati district, New York Central System, with headquarters at Cincinnati, Ohio, was reported in the *Railway Age* of February 18, was born at Richmond, Ind., on February 22, 1882. Mr. Reynolds attended St. Xavier High School, Cincinnati, entering service with the Central in August, 1899, as clerk at Mt. Carmel, Ill. He later served successively at that point, until 1910, as timekeeper, stenographer, chief clerk and yardmaster. Subsequently he was transferred to Harrisburg, Ill., as general yardmaster, and in 1913 became yardmaster at Indianapolis, Ind. Following two years service as general yardmaster at Bellefontaine, Ohio, Mr. Reynolds was appointed to the same position at Cleveland, Ohio. He went to Cincinnati in 1925 as trainmaster, being promoted to superintendent there in January, 1943, from which position he has retired.

G. H. Jedele, whose retirement as superintendent of the Erie division of the New York Central at Erie, Pa., was reported in the *Railway Age* of February 18, was born at Manchester, Mich., on November 15, 1882. Mr. Jedele entered railroad service in September, 1901, as a clerk in the engineering department of the Lake Shore (now N.Y.C.), subsequently becoming extra gang foreman. In October, 1907, he became clerk in the general office of the Lake Shore & Michigan Southern (now also N.Y.C.) and in April, 1909, returned to the position of extra gang foreman on the L.S., subsequently serving as general foreman and assistant roadmaster, successively. In June, 1914, Mr. Jedele was appointed track supervisor of the N.Y.C. and in September, 1916, became trainmaster. He was promoted to assistant superintendent in March, 1926, and to superintendent of the Cleveland division in March, 1938, transferring to the Erie division on April 1, 1943.

John F. Sheeran, assistant to general manager of the Baltimore & Ohio at Cincinnati, Ohio, has been appointed superintendent of transportation, Western region, at that point, succeeding **Clayton R. Elkins,** retired. Mr. Sheeran is succeeded by **C. A. Boyd,** assistant superintendent on the St. Louis division at Washington, Ind. Mr. Elkins was born at North Troy, Vt., on December 25, 1884, and entered railroad service in 1907 as engineering

inspector on the Boston & Albany (part of the New York Central System). In 1910 he became employed in a similar position with the Boston Elevated, entering B. & O. service in 1911 as draftsman. After serving in various capacities, he was appointed assistant supervisor maintenance of way in 1916, and later in the same year was advanced to trainmaster. Mr. Elkins became assistant to general manager in April, 1917, leaving that post the following June to serve in the U. S. Navy at Norfolk as lieutenant, junior grade. In 1919 he returned to the B. & O. as special engineer on the general manager's staff. Subsequently he was appointed assistant superintendent of transportation, becoming transportation assistant at Pittsburgh, Pa., in 1928. He was promoted to superintendent of transportation in 1929.

James E. Guilfoyle, whose appointment as superintendent of the Erie division of the New York Central at Erie, Pa., effective March 1, was reported in the *Railway Age* of February 18, was born at Syracuse, N. Y., 55 years ago. Mr. Guilfoyle entered the service of the N. Y. C. in 1913 as a stenographer in the office of the superintendent at Syracuse. During World War I he was furloughed to serve on the Railroad Board of Adjustment and with the United States Railroad Administration. Rejoining the Central in 1919 he became yardmaster and then assistant trainmaster at Buffalo, N. Y. In 1939 Mr. Guilfoyle was appointed trainmaster at Buffalo. In 1942 he joined the Army as a lieutenant-colonel and was commanding officer of Company 701 of the Railway Grand Division, serving in Africa, Sicily, Italy and southern Austria. He became a colonel in 1943. After leaving the service in 1946 he rejoined the Central as a trainmaster at Buffalo and was promoted to assistant superintendent there in July of the same year, transferring to Erie in 1947.



James E. Guilfoyle

Robert H. Harris has been appointed assistant to the president of the Mystic Terminal Company (Boston & Maine waterfront operating subsidiary) and also assistant general manager of marine terminals of the B.&M. Mr. Harris joined the United Fruit Company at Boston, Mass., in 1917 as secretary to the division manager, later becoming assistant to the division manager, from which position he resigned in 1942 to enter government service. In addition to his position with United Fruit, Mr. Harris served as vice-consul of Panama at Boston during 1940 and 1941. In 1942 he was appointed assistant district manager in Boston of the War Shipping Administration, which later reverted to its parent organization, the United States Maritime Commission. He was appointed Boston district manager for the commission in 1945, which position he held until his recent appointment with the Mystic Terminal and the B.&M.

Jessee W. Huckaby, general yardmaster of the Southern at Danville, Ky., has been promoted to superintendent of terminals at Knoxville, Tenn.

G. Vazquez has been appointed acting superintendent of the Southern Pacific of Mexico at Empalme, Sonora, Mex.

Luis Madrazo Basauri has been appointed assistant to general manager of the National of Mexico at Mexico, D. F.

Howard Jones, assistant superintendent of the St. Louis Terminal division of the Missouri Pacific, has been appointed acting superintendent of the Illinois division and the Missouri-Illinois, east of the Mississippi river, with headquarters at St. Louis, Mo., succeeding **C. W. Exline,** granted a leave of absence because of illness.

TRAFFIC

Charles P. McPake, head rate clerk of the Atchison, Topeka & Santa Fe at Los Angeles, Cal., has been appointed to the newly created position of assistant general freight agent at that point.

Harold A. Lee, general passenger agent of the Canadian Pacific at Toronto, Ont., has been transferred to Montreal, Que., succeeding **Harold C. James,** who has been transferred to Vancouver, B. C.

C. H. Schroeder, commercial agent of the Duluth, South Shore & Atlantic, has been promoted to general agent, with headquarters as before at New York.

E. A. McElvany has been appointed district passenger agent of the Southern Pacific Lines at Harlingen, Tex.

R. F. Ronnan has been appointed division freight agent of the Minneapolis, St. Paul & Sault Ste. Marie at Sault Ste. Marie, Mich.

C. G. Jordan, general agent, passenger department, of the Canadian Pacific at Seattle, Wash., has been appointed assistant general passenger agent, Prairie and Pacific regions, at Vancouver, B. C. **J. M. Roberts** has been made assistant general freight agent—rates and divisions, Pacific region, at Vancouver. **W. W. Gosnell,** district passenger agent at that point, succeeds Mr. Jordan, and is replaced in turn by **J. M. Alderson.**

W. S. Hammond has been appointed general agent, passenger department, of the New York Central at Minneapolis, Minn.

S. L. Hamilton, general agent of the New York, Ontario & Western at Chicago, has been appointed assistant general freight agent at that point.

Joseph B. Blanton has been appointed general agent of the Litchfield & Madison at Dallas, Tex.

H. V. Borjes and **R. B. Warner,** general freight agents of the Atlantic Coast Line, have been appointed assistant freight traffic managers. **J. G. Middleton** and **A. C. Low,** assistant general freight agents, have been appointed general freight agents. **E. P. Crow,** assistant to general freight agent, and **H. H. Cook,** chief divisions clerk, have been appointed assistant general freight agents, and **G. M. Mann,** rate clerk in the freight traffic department, has been appointed assistant to general freight agent. All the above will have headquarters as before at Wilmington, N. C. **G. Y. Duke** has been appointed agricultural and livestock agent at Fitzgerald, Ga.

Mr. Borjes was born at Norfolk, Va., on September 22, 1899, and received his education in the public schools of Norfolk and Judge Pell's Law School, Raleigh, N. C. He entered railroad service with the New York, Philadelphia & Norfolk (now Pennsylvania) at Norfolk in November, 1914. His Coast Line service began as rate clerk at Wilmington in November, 1929, and he subsequently served as assistant general freight agent and general freight agent there.

Mr. Warner was born at Columbus, Ga., on September 28, 1898, and received his education in the Columbus public schools. He entered railroad service with the Central of Georgia at Columbus in 1920 and joined the A.C.L. as a stenographer at Wilmington on June 12, 1922. Since that time he has served successively as clerk, chief clerk, assistant general freight agent, and general freight agent at Wilmington.

Mr. Middleton was born at Warsaw, N. C., on June 4, 1900, and received his education in the public schools of Duplin County and Wake Forest College. He began his railroad career with the A.C.L. as rate clerk at Wilmington and subsequently served as chief divisions clerk, assistant to general freight agent and assistant general freight agent.

Mr. Low was born at Canton, Ga., on May 30, 1898, and received his education in the public schools of Warrenton, Ga. His railroad career began with the Atlanta Joint Terminals at Atlanta, Ga., on June 15, 1917. Entering the service of the A.C.L. on January 1, 1926, as chief clerk to general agent at Atlanta, he

News Department continued on next left-hand page

C-E BOILERS

in New ATLAS TANKERS

First of five large new tankers now under construction for Atlas Tankers, Inc., is the S.S. Capsa, shown below at her launching on September 29th.

C-E Bent Tube Boilers will power all five ships. There are two boilers per ship, each having a normal capacity of 47,285 lb. of steam per hr. with an overload capacity of 65,000 lb. Steam pressure at the boiler outlet is 600 psi, total temperature is 850 F.

Such installations are indicative of our ability to design and build steam generators for any and all purposes.

Have you checked requirements for power and heating plants lately?

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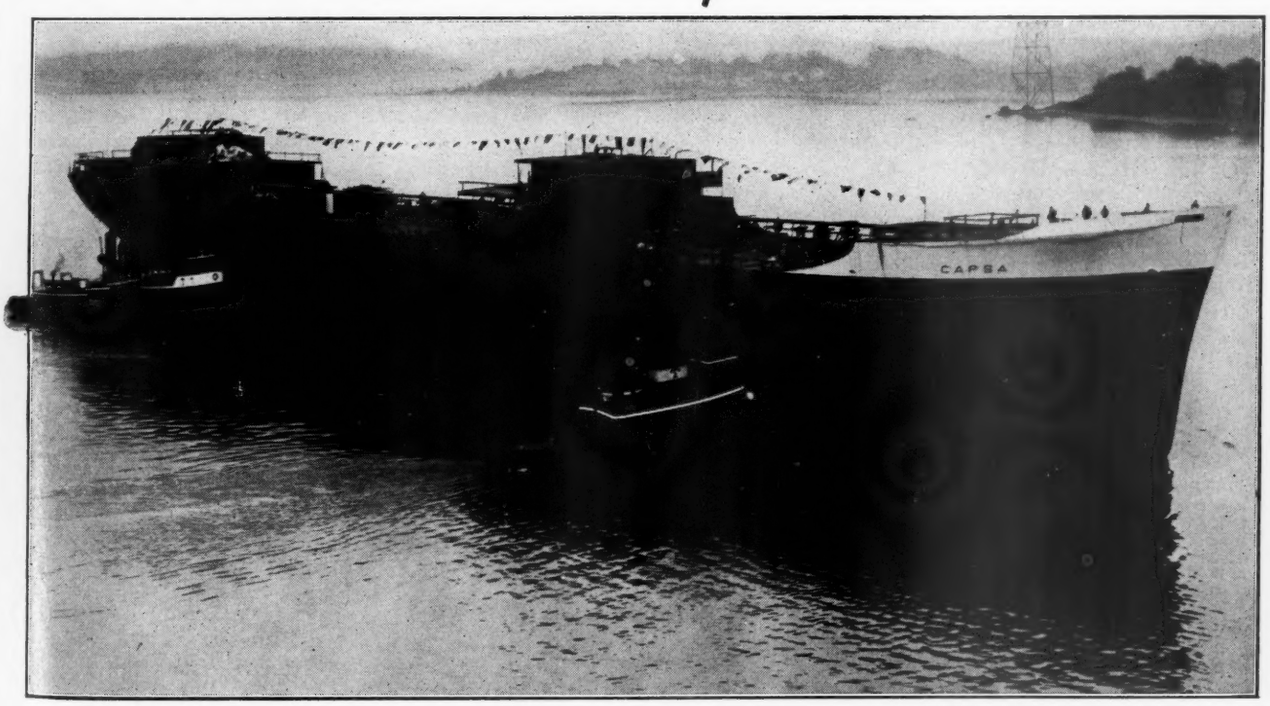


All types of steam generating, fuel burning and related equipment for stationary and marine applications.

went to Wilmington on August 1, 1928, where he subsequently served in the freight traffic department as rate clerk, chief rate clerk, assistant to general freight agent, and assistant general freight agent, successively.

Richard M. Roth, district freight agent of the Pennsylvania at Rochester, N. Y., has been transferred to Altoona, Pa., succeeding **John B. Carey,** who has been appointed coal freight agent at Philadelphia, Pa.

H. E. Erickson, traveling freight and passenger agent of the Chicago, Milwaukee, St. Paul & Pacific, at Cleveland, Ohio, has been appointed general agent at Cincinnati, Ohio, succeeding **G. C. Armstrong,** retired after 44 years of service.

MECHANICAL

E. M. Vandiver has been appointed acting master mechanic, Arkansas division, Missouri Pacific, with headquarters at North Little Rock, Ark., succeeding **George Schepp,** on sick leave.

S. E. Mueller, master mechanic of the Chicago, Rock Island & Pacific at Cedar Rapids, Iowa, has retired after 50 years of service. He is succeeded by **J. W. Gann,** general mechanical inspector.

Richard E. Gallagher, electrical engineer of the Louisville & Nashville at Louisville, Ky., has retired after 26 years of service. A native of Baltimore, Md., Mr. Gallagher attended public schools there and the Baltimore Polytechnic Institute. He served in the electrical department of the Baltimore & Ohio for 10 years, and later engaged in electrical contracting work at Norfolk, Va., and Baltimore. In 1914 he became first assistant electrical engineer for the Seaboard Air Line, in which capacity he served for several years. Subsequently he left the S. A. L. to join the Stone Franklin Company as sales engineer in the Middle West district. In January, 1923, Mr. Gallagher entered L. & N. service as assistant electrical engineer. He was promoted to electrical engineer in 1934.

Lorenzo Valadez Valdes has been appointed acting superintendent of machinery and motive power of the National of Mexico.

A. V. Nystrom, superintendent, car department, Chicago, Rock Island & Pacific, resigned on March 1 to accept an appointment as general superintendent of shops of the Armour Car Lines, with headquarters at Chicago. An illustrated sketch of Mr. Nystrom's career was published in the *Railway Age* of July 23, 1949, at the time of his appointment as assistant to the general superintendent of motive power of the Rock Island. His appointment as superintendent of the car department was noted in the *Railway Age* of September 17, 1949.

ENGINEERING & SIGNALING

C. K. Lucas, office engineer of the Clinchfield at Erwin, Tenn., has been promoted to assistant chief engineer. The position of office engineer has been abolished.

W. E. Laird, division engineer of the Little Rock and Louisiana divisions, Missouri Pacific, has been transferred in that capacity to the St. Louis Terminal and Illinois divisions at St. Louis, Mo. He succeeds **W. W. Salisbury,** transferred to a similar position on the Eastern and Kansas City Terminal divisions. Tranferred to succeed Mr. Laird is **W. Rambo,** division engineer of the Central Kansas and Colorado divisions, who has been replaced in turn by **G. L. Brown,** division engineer at Kansas City, Mo.

George Henry Pescud, general superintendent of communications of the Canadian Pacific at Winnipeg, Man., has been appointed assistant general manager of communications at Montreal, Que. **Leonard E. Hamson,** superintendent of communications of the Pacific region at Vancouver, B. C., has been appointed general superintendent of communications of the Eastern region at Montreal, Que., succeeding **P. G. McLean,** who has been transferred to the Prairie and Pacific regions at Winnipeg. **R. V. Tombe,** superintendent of communications of the Saskatchewan district at Moose Jaw, Sask., has been transferred to the Pacific region, at Vancouver. **A. E. Emery,** superintendent of traffic at Winnipeg, succeeds Mr. Tombe at Moose Jaw and **D. N. McLeod,** inspector at Vancouver, succeeds Mr. Emery at Winnipeg.

George Henry Pescud

Mr. Pescud joined the communications department of the C.P. in 1923 as a messenger at Swift Current, Sask., at the age of 14. Eighteen months later he became agent at Melfort, Sask., subsequently serving as agent and operator at various Saskatchewan centers until 1936, when he was appointed night chief operator at Saskatoon. From 1937 to 1943 Mr. Pescud was chief clerk to the general manager at Montreal, then returning west as superintendent of traffic at Winnipeg. In 1944 he was promoted to superintendent of the Saskatchewan district at Moose Jaw and in June, 1946, became general superintendent of communications at Winnipeg, with jurisdiction over all western Canada.

Mr. Hamson joined the communications department at Nelson, B. C., in 1913 and went to Vancouver, B. C., in 1917, as operator, following service at Rossland, B. C., and Nelson. He became chief operator at Vancouver in 1933 and inspector there in 1938. From 1943 to 1946 he was on special duties with the department in and around Montreal. In the latter year he became superintendent at Vancouver, which position he held until his recent promotion to general superintendent of communications, Eastern region.

Leonard E. Hamson

OBITUARY

Louis Henry Phetteplace, who retired in 1945 as general manager of the Clinchfield at Erwin, Tenn., was killed on March 20 at St. Petersburg Beach, Fla., in an automobile accident in which his son and daughter were also killed. Mr. Phetteplace was born at Smithsburg, Md., on April 30, 1871, and entered railroad service in 1888 as a messenger on the Western Maryland, subsequently going with the Norfolk & Western. He joined the Carolina, Clinchfield & Ohio (now Clinchfield) in 1908 as superintendent, becoming general superintendent in 1911 and general manager in 1913.

J. Curtis Platt, president of the Mississippi Central at Scranton, Pa., since 1946, died on March 19 after a short illness. Mr. Platt was born at Cold Spring, N. Y., on November 18, 1887, and was graduated from Yale University in 1910. He had been associated with the Scranton Lackawanna Trust Company since 1928 as assistant treasurer, treasurer and president, and at the time of his death was chairman of the board.

GENERAL NEWS

(Continued from page 66)

To Hold Hearing in Ogden Gateway Case at Cheyenne

The Interstate Commerce Commission has announced that an additional hearing in the Ogden Gateway case will be held at Cheyenne, Wyo., on April 17, before Examiner F. E. Mullen. The commission's notice said this assignment was in response to requests of the Union Pacific and certain intervenors, and will be in addition to the hearing now scheduled at Boise, Idaho, on April 3. (See *Railway Age* of February 11, page 54.)

Monon to Try Budd Rail Car

For a two-week period beginning April 1, the Chicago, Indianapolis & Louisville will conduct trial operation of the new Budd Diesel rail car between Bedford, Ind., and Monon. The trial service will provide two daily round trips serving Bloomington, Greencastle, Crawfordsville and LaFayette, with a connection with Chicago trains at Monon for through passengers.

RR Hour Wins Radio Award

Success of the "Railroad Hour" was underscored last week at New York when it received a "Michael" at the first annual award dinner of the Academy of Arts and Sciences of Radio and Television Best Magazine. In being named one of the top three dramatic radio programs, the Railroad Hour was placed alongside Lux Radio Theater and Theater Guild on the Air.

"Michaels" — similar to "Oscars" in the motion picture field — were given for outstanding performance in 28 categories of radio and television broadcasting. Selection of winners was determined by balloting of 1,250 men and women in broadcasting, newspaper, education, religion and other fields.

In presenting the "Michael" to the Association of American Railroads, sponsor of the Railroad Hour, Edward Bobley, publisher of the magazine, said:

"The Railroad Hour is . . . in effect, a successful transfer of the musical theater to radio. As such, [it] adapts the best of the stage's great show hits to the mass medium of radio, thereby acquainting millions of people with the entertainment the living theater offers in its finest achievement."

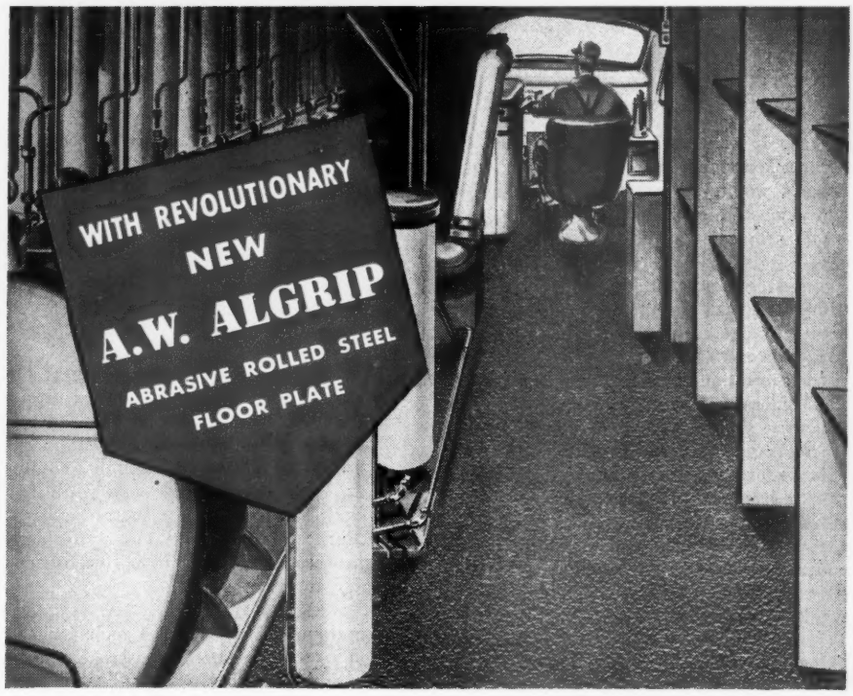
Schwietert Urges New Policy

If the nation's transportation system is to be maintained as a private enterprise, the national transportation policy must be changed. This conclusion was expressed by A. H. Schwietert, traffic director of the Chicago Association of Commerce & Industry, in a recent speech before the Forest Products Research Society in Chicago.

Promotional activities and subsidies for some carriers, not accorded other carriers, Mr. Schwietert said, will eventually result in government operation of our entire transportation system.

The recent proposal by Secretary of

NOW RAILROADS CAN END COSTLY SLIPPING ACCIDENTS PERMANENTLY



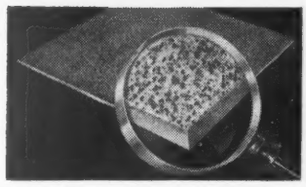
Non-Slip Even on Steep Inclines

Now, for the first time, Railroads can protect both passengers and employees from dangerous slipping accidents with A.W. ALGRIP ABRASIVE Rolled Steel Floor Plate.

A.W. ALGRIP is made by rolling abrasive grain, the same type used in grinding wheels, as an integral part of the upper portion of steel floor plate. Wet or dry, A.W. ALGRIP prevents slipping, even on steep inclines. It retains its non-slip qualities for a lifetime because as the surface wears new abrasive particles are constantly exposed.

A.W. ALGRIP is ideal for installation on freight and passenger platforms, ramps, walkways, bridges, catwalks, signal towers and on rolling stock. A.W. ALGRIP, unlike other abrasive flooring, is light in weight but high in strength. It stands severe abuse without cracking and is not damaged by heat, fire or heavy traffic.

Write or use Coupon for Complete information and 8-page descriptive booklet today.



Even distribution of Abrasive Particles shown by magnifying glass.

Guards against slipping on railroad car platforms and trapdoors.

NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW

A.W. ALGRIP ABRASIVE ROLLED STEEL FLOOR PLATE

A Product of **ALAN WOOD STEEL COMPANY**

CONSCHOHOCKEN 24, PA.

Gentlemen: *Please rush me complete information and a FREE copy of your 8 page A.W. ALGRIP BOOKLET.*

*Name*_____ *Title*_____

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Other Products: PERMACLAD Stainless Clad Steel • A.W. SUPER-DIAMOND Floor Plate • Billets Plates • Sheets • Strip • (Alloy and Special Grades.)

Commerce Sawyer, that a user charge or toll charge of some kind be assessed for use of facilities constructed at government expense to place highway, waterway and air carriers on a self-sustaining basis, Mr. Schwietert said, might result in increased rates for such carriers and an ultimate shift in traffic back to the rails.

"It is difficult," he said, "to see how the placing of all carriers on an equal basis would adversely affect the ability of industry to produce and distribute its goods in competition with other sections of the country."

Discussing freight rates, Mr. Schwietert asserted that if there were no other factors to be taken into consideration, and if railroads were the only method of transportation, it could be argued with considerable force that freight rates are not as high as they should be. While freight rates today are at the highest level in history, they are lower in comparison with commodity prices than in 1939. Railroads are not earning a reasonable return on their investment, nor are they earning enough to rehabilitate and modernize their plants so as to provide the public with the efficient and economical service to which they are entitled.

"But there are other factors," Mr. Schwietert said, "which must be taken into consideration. The principal one is competition with other forms of transportation. There are many who believe that, in the long run, the diversion of traffic from the rails to other forms of transportation, resulting from the present rate level, will cause a loss rather than a gain in net revenue.

"Percentage increases in freight rates have had an adverse effect on particular commodities carrying the greatest proportion of overhead expense, that is, on relatively high-valued commodities. Thus, the greatest increase in carload freight rates has been applied to manufactured goods, which had borne approximately 62 per cent of the railroad's overhead burden, though such traffic constituted less than 35 per cent of the total ton-miles of traffic. This would indicate that manufactured goods are more vulnerable to competition than other traffic."

ORGANIZATIONS

A.S.M.E. Railroad Division To Meet In St. Louis

In conjunction with the semiannual meeting of the American Society of Mechanical Engineers at the Hotel Statler, St. Louis, Mo., June 19-23, the Railroad Division will hold two technical sessions on June 20.

Subjects for the morning session will be "Treating Feedwater for Railway Diesel Steam Generators," by John F. Wilkes, technical director, railroad department, Dearborn Chemical Company, Chicago; and "Dynamics of 'Shimmy' in Passenger Car Trucks," by S. G. Guins, project engineer, office of research consultant, Chesapeake & Ohio, Cleveland, Ohio.

In the afternoon, subjects will include "Development and Testing of Brakes for High-Speed Railroad Equipment," by Carl E. Tack, assistant chief mechanical engineer, American Steel Foundries, Chicago; and "High-Speed Braking," by C. L. Eksergian, executive engineer and assistant to vice-president, Budd Company, Philadelphia, Pa.

The meeting will be presided over by Chairman K. A. Browne, research consultant, president's office, C. & O. Secretary E. L. Woodward, western mechanical editor, *Railway Age*, will serve as vice-chairman and recorder.

Francis G. McCann, general agent of the New York Central, was elected president of the **Traffic Club of Washington, D. C.**, at a March 15 meeting in that city. He succeeds William E. Hayghe, acting chief, Division of Traffic and Utilities, Federal Supply Service, General Services Administration. John S. Peters, chief, Transportation and Service, Reconstruction Finance Corporation, was elected first vice-president, and F. E. Richter, general agent, Missouri Pacific Lines, second vice-president. Charles E. Milford, administrative officer, Finance Office, U. S. Army, was reelected secretary-treasurer.

The following meetings have been scheduled by the Freight Loss and Damage Prevention Committee of the **New England Shippers Advisory Board**: April 3, Indian Hill Country Club, New Britain, Conn., 6:30 p.m.; April 10, Narragansett Hotel, Providence, R. I., 6:30 p.m., and Putnam & Thurston restaurant, Worcester, Mass., 7:30 p.m.; April 11, Hotel Kimball, Springfield, Mass., 6:30 p.m.; April 13, Light House Inn, New London, Conn., 7 p.m.; April 17, Hotel Stratfield, Bridgeport, Conn., 6:30 p.m.; April 24, Hotel Falmouth, Portland, Me., 6:30 p.m.; May 9, Rutland, Vt., 6 p.m. (place undesignated as yet); May 11, Maridor restaurant, Framingham, Mass., 6:30 p.m.

The March 27, meeting of the **Toronto Railway Club** was designated as "Maintenance of Way Night." H. H. Talboys, vice-president, Railway Equipment division, Nordberg Manufacturing Company, Milwaukee, Wis., spoke on "Problems of Designing Machines for Use in Track Maintenance."

Under the chairmanship of Dr. D. D. Fuller of Columbia University, clarification of oil reclaiming in its industry-wide aspects will be the subject of a symposium on April 11, during the fifth annual convention of the **American Society of Lubrication Engineers**, Hotel Statler, Detroit, Mich. Floor discussion will be centered on the significance of oil reclaiming from the standpoints of conservation, safety, economics and product quality.

L. K. Sillcox, vice-president of the New York Air Brake Company, will speak on "Time and Tonnage" at the next meeting of the **New England Railroad Club**, which will be held in the Hotel Vendome, Boston, Mass., on April 12.

Meetings and Conventions

The following list gives names of secretaries, dates of next or regular meetings and places of meetings.

AIR BRAKE ASSOCIATION.—Lawrence Wilcox, Room 827, 80 E. Jackson Blvd., Chicago 4, Ill. Annual meeting, September 18-21, 1950, Hotel Sherman, Chicago, Ill.

ALLIED RAILWAY SUPPLY ASSOCIATION.—C. F. Weil, American Brake Shoe Company, 6th floor, 109 N. Wabash Ave., Chicago 2, Ill. Annual meeting, September 18-21, 1950, Hotel Sherman, Chicago, Ill.

AMERICAN ASSOCIATION OF BAGGAGE TRAFFIC MANAGERS.—E. P. Soebbing, 1450 Railway Exchange Bldg., St. Louis 1, Mo. Annual meeting, June 27-29, 1950, Hotel Nicollet, Minneapolis, Minn.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC AGENTS—C. A. Melin, P. O. Box 5025, Cleveland 1, O.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS.—B. D. Branch, C.R.R. of N. J., 143 Liberty St., New York 6, N. Y.

AMERICAN ASSOCIATION OF RAILROAD SUPERINTENDENTS.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, June 6-8, 1950, Hotel Stevens, Chicago, Ill.

AMERICAN RAILWAY BRIDGE AND BUILDING ASSOCIATION.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, September 18-20, 1950, Hotel Stevens, Chicago, Ill.

AMERICAN RAILWAY CAR INSTITUTE.—W. C. Tabbert, 19 Rector St., New York 6, N. Y.

AMERICAN RAILWAY DEVELOPMENT ASSOCIATION.—W. A. Kluender, Chicago & North Western Railway, 275 E. Fourth St., St. Paul 1, Minn. Annual meeting, April 19-21, 1950, Fontenelle Hotel, Omaha, Neb.

AMERICAN RAILWAY ENGINEERING ASSOCIATION.—Works in cooperation with the Association of American Railroads, Engineering Division—Neal D. Howard, 59 E. Van Buren St., Chicago 5, Ill.

AMERICAN RAILWAY MAGAZINE EDITORS' ASSOCIATION.—W. B. Grumley, Nickel Plate Road Magazine, 432 Terminal Tower, Cleveland 1, O.

AMERICAN SHORT LINE RAILROAD ASSOCIATION.—C. E. Huntley, 2000 Massachusetts Ave., N. W. Washington 6, D. C. Annual meeting, October, 1950, Tulsa, Okla.

AMERICAN SOCIETY FOR TESTING MATERIALS.—R. J. Painter, Asst. Secretary, 1916 Race St., Philadelphia 3, Pa. Annual meeting and exhibit of testing apparatus and related equipment, June 26-30, 1950, Chalfonte-Haddon Hall, Atlantic City, N. J.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS.—C. E. Davies, 29 W. 39th St., New York 18, N. Y.

Railroad Division.—E. L. Woodward, *Railway Mechanical and Electrical Engineer*, 79 W. Monroe St., Chicago 3, Ill.

AMERICAN WOOD-PRESERVERS' ASSOCIATION.—H. L. Dawson, 839 Seventeenth St., N. W., Washington 6, D. C. Annual meeting, April 25-27, 1950, Rice Hotel, Houston, Tex.

ASSOCIATED TRAFFIC CLUBS OF AMERICA, INC.—R. A. Ellison, Cincinnati Chamber of Commerce, Federal Reserve Bank Bldg., Cincinnati 2, O. Annual meeting, October 16-18, 1950 (tentative), Hotel Commodore, New York, N. Y.

ASSOCIATION OF AMERICAN RAILROAD DINING CAR OFFICERS.— W. F. Ziervogel, 605 S. Ranken Ave., St. Louis 3, Mo. Annual meeting, September 19-21, 1950, Hotel Statler, New York, N. Y.

ASSOCIATION OF AMERICAN RAILROADS.—George M. Campbell, Transportation Bldg., Washington 6, D. C.

Operations and Maintenance Department.—J. H. Aydelott, Vice-President, Transportation Bldg., Washington 6, D. C.

Operating-Transportation Division.—L. R. Knott, 59 E. Van Buren St., Chicago 5, Ill.

Operating Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y.

Transportation Section.—H. A. Eaton, 59 E. Van Buren St., Chicago 5, Ill.

Communications Section.—A. H. Grothmann, 30 Vesey St., New York 7, N. Y. Annual meeting, October 17-19, 1950, French Lick Springs Hotel, French Lick Springs, Ind.

Fire Protection and Insurance Section.—W. E. Todd, 59 E. Van Buren St., Chicago 5, Ill.

Freight Station Section.—W. E. Todd, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, June 6-8, 1950, Hotel Statler, St. Louis, Mo.

Medical and Surgical Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y. Annual meeting, April 24-25, 1950, Edgewater Gulf Hotel, Edgewater Park, Miss.

Protective Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y. Annual meeting, May 24-26, 1950, Hotel Statler, Boston, Mass.

Safety Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y. Annual meeting, June 22-24, 1950, Cosmopolitan Hotel, Denver, Colo.

Engineering Division.—Neal D. Howard, 59 E. Van Buren St., Chicago 5, Ill.

Construction and Maintenance Section.—Neal D. Howard, 59 E. Van Buren St., Chicago 5, Ill.

Electrical Section.—Neal D. Howard, 59 E. Van Buren St., Chicago 5, Ill.

Signal Section.—R. H. C. Balliet, 30 Vesey St., New York 7, N. Y. Annual meeting September 18-20, 1950, Hotel Statler, New York, N. Y.

Mechanical Division.—Fred Peronto, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, June 26-28, 1950, Congress Hotel, Chicago, Ill.

Electrical Section.—59 E. Van Buren St., Chicago 5, Ill.

Purchases and Stores Division.—W. J. Farrell (Executive Vice-Chairman), Transportation Bldg., Washington 6, D. C. Annual meeting, June 14-16, 1950, Hotel Statler, St. Louis, Mo.

Freight Claim Division.—C. C. Beauprie, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, May 2-4, 1950, Hotel Jefferson, Richmond, Va.

Motor Transport Division.—Transportation Bldg., Washington 6, D. C.

Car Service Division.—Arthur H. Gass, Chairman, Transportation Bldg., Washington 6, D. C.

Finance, Accounting, Taxation and Valuation Department.—E. H. Bunnell, Vice-President, Transportation Bldg., Washington 6, D. C.

Accounting Division.—E. R. Ford, Transportation Bldg., Washington 6, D. C. Annual meeting, July 31-August 3, 1950, Chateau Laurier, Ottawa, Ontario, Canada.

Treasury Division.—E. R. Ford, Transportation Bldg., Washington 6, D. C.

Traffic Department.—Walter J. Kelly, Vice-President, Transportation Bldg., Washington 6, D. C.

ASSOCIATION OF INTERSTATE COMMERCE COMMISSION PRACTITIONERS.—Sarah F. McDonough (Executive Secretary) 2218 I.C.C. Building, Washington 25, D. C. Annual meeting, November 9-10, 1950, Hotel Jefferson, St. Louis, Mo.

ASSOCIATION OF RAILROAD ADVERTISING MANAGERS.—R. P. Schaffer, Chicago & North Western Ry., 400 W. Madison St., Chicago 6, Ill.

ASSOCIATION OF RAILWAY CLAIM AGENTS.—F. J. Johnson, Gulf, Mobile & Ohio R. R., 104 St. Francis St., Mobile 5, Ala. Annual meeting, June 21-23, 1950, Hotel President, Kansas City, Mo.

BRIDGE AND BUILDING SUPPLY MEN'S ASSOCIATION.—E. C. Gunther Duff-Norton, Mfg. Co., 122 S. Michigan Ave., Chicago 3, Ill. Exhibit in conjunction with meeting of American Railway Bridge Building Association, September 18-20, 1950, The Coliseum, Chicago, Ill.

CANADIAN RAILWAY CLUB.—C. R. Crook, 4415 Marcil Ave., N. D. G., Montreal 28, Que. Regular meetings second Monday of each month, except June, July and August, Mount Royal Hotel, Montreal, Que.

CAR DEPARTMENT ASSOCIATION OF ST. LOUIS.—J. J. Sheehan, 1101 Missouri Pacific Bldg., St. Louis 3, Mo. Regular meetings, fourth Tuesday of each month, except June, July and August, Hotel DeSoto, St. Louis, Mo.

CAR DEPARTMENT OFFICERS' ASSOCIATION.—F. H. Stremmel, 6536 Oxford Ave., Chicago 31, Ill. Annual meeting, September 18-21, 1950, Hotel Sherman, Chicago, Ill.

CAR FOREMAN'S ASSOCIATION OF CHICAGO.—J. A. Dingess, 8637 South Euclid Ave., Chicago 17, Ill. Regular meetings, second Monday of each month except June, July and August, LaSalle Hotel, Chicago, Ill.

CENTRAL RAILWAY CLUB OF BUFFALO.—R. E. Mann, Hotel Statler, McKinley Square, Buffalo 5, N. Y. Regular meetings, second Thursday of each month, except June, July and August, Hotel Statler, Buffalo, N. Y.

COORDINATED RAILROAD MECHANICAL ASSOCIATIONS.—C. F. Weil, American Brake Shoe Company, 6th floor, 109 N. Wabash Ave., Chicago 2, Ill. Annual meeting, September 18-21, 1950, Hotel Sherman, Chicago, Ill.

EASTERN ASSOCIATION OF CAR SERVICE OFFICERS.—H. J. Hawthorne, Union Railroad, East Pittsburgh, Pa. Next meeting, April 13, 1950, Roosevelt Hotel, Pittsburgh, Pa.

EASTERN CAR FOREMAN'S ASSOCIATION.—W. P. Dizard, 30 Church St., New York 7, N. Y. Regular meetings, second Friday of January, February (Annual Dinner), March, April, May, October and November, 29 W. 39th St., New York, N. Y.

LOCOMOTIVE MAINTENANCE OFFICERS' ASSOCIATION.—C. M. Lipscomb, 1721 Parker St., North Little Rock, Ark. Annual meeting, September 18-21, 1950, Hotel Sherman, Chicago, Ill.

MAINTENANCE OF WAY CLUB OF CHICAGO.—E. C. Patterson, 400 W. Madison St., Chicago 6, Ill. Regular meetings, fourth Monday of each month, October through April, inclusive, except December, when the third Monday, at Eitel's Restaurant, Field Bldg.

MASTER BOILER MAKERS' ASSOCIATION.—A. F. Stiglmeire, 29 Parkwood St., Albany 3, N. Y. Annual meeting, September 18-21, 1950, Hotel Sherman, Chicago, Ill.

METROPOLITAN MAINTENANCE OF WAY CLUB.—Walter L. Turner, Jr., Simmons-Boardman Publishing Corp., 30 Church St., New York 7, N. Y. Meets in October, December, February and April. Next meeting, dinner, April 27, 1950, Hotel Shelburne, New York, N. Y.

MILITARY RAILWAY SERVICE VETERANS.—S. Thomson, 1961 W. Sheridan Road, Chicago 40, Ill.

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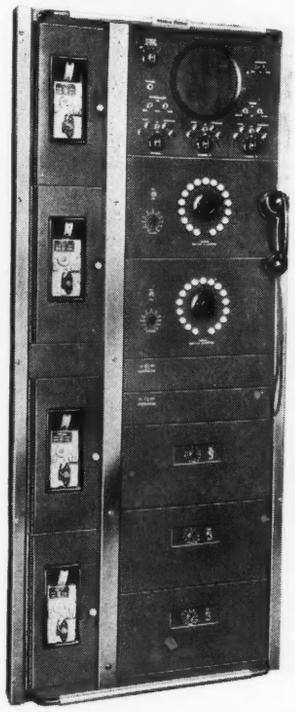

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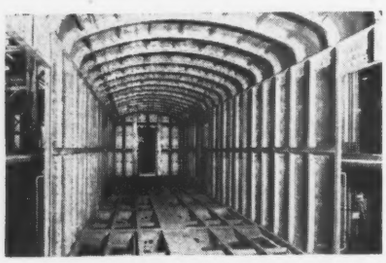

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COMMISSIONERS.—Ben Smart, 7413 New Post Office Bldg., Washington 25, D. C. Annual meeting, November 13-16, 1950, Phoenix, Ariz.

NATIONAL ASSOCIATION OF SHIPPERS' ADVISORY BOARDS. — A. P. Little, Dennison Manufacturing Company, Framingham 12, Mass. Annual meeting, October 4-5, 1950, Denver, Colo.

NATIONAL DEFENSE TRANSPORTATION ASSOCIATION.—Miss Lois E. Casavant, 930 F. St., N. W. Washington 4, D. C. Annual meeting, October 16-18, 1950, San Francisco, Cal.

NATIONAL INDUSTRIAL TRAFFIC LEAGUE. — Edward F. Lacey, Suite 450, Munsey Bldg., Washington 4, D. C. Annual meeting, November 16-17, 1950, San Francisco, Calif.

NATIONAL RAILWAY APPLIANCES ASSOCIATION.—R. B. Fisher, 59 E. Van Buren St., Chicago 5, Ill.

NATIONAL SAFETY COUNCIL, RAILROAD SECTION.—J. R. Thexton, Delaware, Lackawanna & Western R.R. Co., Hoboken, N. J.

NEW ENGLAND RAILROAD CLUB.—William M. McCombs, 35 Lewis Wharf, Boston 10, Mass. Regular meetings, second Tuesday of each month, except June, July, August and September, Hotel Vendome, Boston, Mass.

NEW YORK RAILROAD CLUB. —D. W. Pye, 30 Church St., New York 7, N. Y. Regular meetings, third Thursday of each month, except June, July, August, September and December, 29 W. 39th St., New York, N. Y.

NORTHWEST CARMEN'S ASSOCIATION. — G. H. Wells, Northern Pacific Railway, St. Paul 1, Minn. Regular meetings, first Monday of each month, except June, July and August, Midway Club, 1931 University Ave., St. Paul, Minn.

NORTHWEST LOCOMOTIVE ASSOCIATION. — R. M. Wigfield, Northern Pacific Ry., Room 1134, G. O. Bldg., St. Paul 1, Minn. Regular meetings, third Monday of each month, except June, July and August, Midway Club, 1931 University Ave., St. Paul, Minn.

PACIFIC RAILWAY CLUB. — S. E. Byler, 121 E. Sixth St., Los Angeles 14, Cal. Rugular meetings, second Thursday of each alternate month at Palace Hotel, San Francisco, Cal., and Hotel Biltmore, Los Angeles, Cal.

RAILWAY BUSINESS ASSOCIATION.—P. H. Middleton, First National Bank Bldg., Chicago 3, Ill.

RAILWAY CLUB OF PITTSBURGH. — J. D. Conway, 308 Keenan Bldg., Pittsburgh, Pa. Regular meetings, fourth Thursday of each month, except June, July and August. Fort Pitt Hotel, Pittsburgh, Pa.

RAILWAY ELECTRIC SUPPLY MANUFACTURERS' ASSOCIATION. — J. McC. Price, Allen-Bradley Company, 445-447 N. LaSalle St., Chicago 10, Ill. Exhibit in conjuction with meetings of Coordinated Railroad Mechanical Associations and Electrical Sections of Association of American Railroads, September 18-21, 1950, Hotel Sherman, Chicago, Ill.

RAILWAY FUEL AND TRAVELING ENGINEERS' ASSOCIATION. — T. Duff Smith, Room 811, Utilities Bldg., 327 S. La Salle St., Chicago 4, Ill. Annual meeting, September 18-21, 1950, Hotel Sherman, Chicago, Ill.

RAILWAY SUPPLY MANUFACTURERS' ASSOCIATION.—A. W. Brown, 60 E. 42nd St., New York 17, N. Y.

RAILWAY TELEGRAPH AND TELEPHONE APPLIANCE ASSOCIATION. — G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with Communications Section of A.A.R.

RAILWAY TIE ASSOCIATION. — Roy M. Edmonds, 610 Shell Bldg., St. Louis 3, Mo. Annual meetings, August 28-30, 1950, Brown Hotel, Louisville, Ky.

ROADMASTERS AND MAINTENANCE OF WAY ASSOCIATION.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, September 18-20, 1950, Hotel Stevens, Chicago, Ill.

SIGNAL APPLIANCE ASSOCIATION. — G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with A.A.R. Signal Section.

SOUTHEASTERN DIESEL RAILWAY CLUB. — John Sims, P. O. Box 155, Buena Vista Station, Miami 37, Fla. Regular meetings, second Tuesday in February, April, June, August, October and December, 9:30 a.m., Mayflower Hotel, Jacksonville, Fla.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB. — A. T. Miller, 4 Hunter St., S. E. Atlanta, Ga. Regular meetings, third Thursday in January, March, May, July, September and November, Ansley Hotel, Atlanta, Ga.

SOUTHERN ASSOCIATION OF CAR SERVICE OFFICERS. —E. E. Humble, High Point, Thomasville & Denton R.R., High Point, N. C. Next meeting, July 26-27, 1950, Edgewater Gulf Hotel, Edgewater Park, Miss.

TORONTO RAILWAY CLUB.—D. L. Chambers, P. O. Box 8, Terminal "A", Toronto 2, Ont. Regular meetings, fourth Monday of each month, except June, July and August, Royal York Hotel, Toronto, Ont.

TRACK SUPPLY ASSOCIATION. — Lewis Thomas, Q and C Company, 59 E. Van Buren St., Chicago 5, Ill. Exhibit in conjuction with meeting of Roadmasters & Maintenance of Way Association of America, September 18-20, 1950, The Coliseum, Chicago, Ill.

UNITED ASSOCIATIONS OF RAILROAD VETERANS. — Roy E. Collins, 225 Bidwell Ave., Westerleigh, Staten Island 2, N. Y.

WESTERN RAILWAY CLUB. — E. E. Thulin, Suite 339, Hotel Sherman, Chicago 1, Ill. Meeting scheduled for: April 18 and May 22, Hotel Sherman, Chicago, Ill.